SOAP API Developer Guide

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@salesforcedocs

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GETTING STARTED

CHAPTER 1 Introducing SOAP API

In this chapter ...

Salesforce provides programmatic access to your org's information using simple, powerful, and secure application programming interfaces. To use this document, you should have a basic familiarity with software development, Web services, and the Salesforce user interface.

Any functionality described in this guide is available if your organization has the API feature enabled. This feature is enabled by default for Performance, Unlimited, Enterprise, and Developer Editions. Some Professional Edition organizations may also have the API enabled. If you cannot access the features you see in this guide, contact Salesforce.

Note: Salesforce Education Services offers a suite of training courses to enable developers to design, create, integrate, and extend applications built on the Lightning platform. Be sure to visit http://www.salesforce.com/training to learn more.

When to Use the SOAP API

The Salesforce prebuilt applications provide powerful CRM functionality. In addition, Salesforce provides the ability to customize the prebuilt applications to fit your organization. However, your organization may have complex business processes that are unsupported by the existing functionality. When this is the case, the Lightning Platform includes a number of ways for advanced administrators and developers to implement custom functionality. These include the SOAP API, Apex, and Visualforce.

SOAP API

Use SOAP API to create, retrieve, update or delete records, such as accounts, leads, and custom objects. With more than 20 different calls, SOAP API also allows you to maintain passwords, perform searches, and much more. Use SOAP API in any language that supports Web services.

REST API

REST API provides a powerful, convenient, and simple REST-based web services interface for interacting with Salesforce. Its advantages include ease of integration and development, and it's an excellent choice of technology for use with mobile applications and web projects. For certain projects, you may want to use REST API with other Salesforce REST APIs. To build UI for creating, reading, updating, and deleting records, including building UI for list views, actions, and dependent picklists, use User Interface API. To build UI for Chatter, communities, or recommendations, use Chatter REST API. If you have many records to process, consider using Bulk API, which is based on REST principles and optimized for large sets of data.

Bulk API

Bulk API is based on REST principles and is optimized for loading or deleting large sets of data. You can use it to query, queryAll, insert, update, upsert, or delete many records asynchronously by submitting batches. Salesforce processes batches in the background.

SOAP API, in contrast, is optimized for real-time client applications that update a few records at a time. You can use SOAP API for processing many records, but when the data sets contain hundreds of thousands of records, SOAP API is less practical. Bulk API is designed to make it simple to process data from a few thousand to millions of records.

Metadata API

Use Metadata API to retrieve, deploy, create, update, or delete customizations for your org. The most common use is to migrate changes from a sandbox or testing org to your production environment. Metadata API is intended for managing customizations and for building tools that can manage the metadata model, not the data itself.

The easiest way to access the functionality in Metadata API is to use the Force.com IDE or Ant Migration Tool. Both tools are built on top of Metadata API and use the standard Eclipse and Ant tools, respectively, to simplify working with Metadata API.

- Force.com IDE is built on the Eclipse platform, for programmers familiar with integrated development environments. Code, compile, test, and deploy from within the IDE.
- The Ant Migration Tool is ideal if you use a script or the command line for moving metadata between a local directory and a Salesforce org.

Apex

Use Apex if you want to:

- Create Web services.
- Create email services.
- Perform complex validation over multiple objects.
- Create complex business processes that are not supported by workflow.
- Create custom transactional logic (logic that occurs over the entire transaction, not just with a single record or object).
- Attach custom logic to another operation, such as saving a record, so that it occurs whenever the operation is executed, regardless of whether it originates in the user interface, a Visualforce page, or from SOAP API.

For more information, see the *Apex Developer Guide*.

Visualforce

Visualforce consists of a tag-based markup language that gives developers a more powerful way of building applications and customizing the Salesforce user interface. With Visualforce you can:

- Build wizards and other multistep processes.
- Create your own custom flow control through an application.
- Define navigation patterns and data-specific rules for optimal, efficient application interaction.

For more information, see the *Visualforce Developer's Guide*.

Customize, Integrate, and Extend Your Salesforce Solutions

The Lightning platform allows you to customize, integrate, and extend your Salesforce organization using the language and platform of your choice:

- **Customize Salesforce** with custom fields, links, objects, page layouts, buttons, record types, s-controls, and tabs to meet specific business requirements.
- **Integrate Salesforce** with your organization's ERP and finance systems, deliver real-time sales and support information to company portals, and populate critical business systems with customer information.
- **Extend Salesforce** in presentation, business logic, and data services with new functionality that reflects the business requirements of your organization.

For more information about Lightning Platform solutions, developer resources, and community resources, go to Salesforce Developers.

Supported Salesforce Editions

To use SOAP API, your organization must use Enterprise Edition, Performance Edition, Unlimited Edition, or Developer Edition. If you are an existing Salesforce customer and want to upgrade to Enterprise, Unlimited, or Performance Edition, contact your account representative.

To develop Web service client applications, it is strongly recommended that you use Developer Sandbox, which is an exact replica of your Salesforce deployment, including all customization and data. For more information, see `http://www.salesforce.com/products/sandbox.jsp`.

Developer Edition provides access to all of the features available with Enterprise Edition. Developer Edition is constrained only by the number of users and the amount of storage space. Developer Edition provides a development context that allows you to build and test your solutions without affecting your organization's live data. Developer Edition accounts are available for free at `https://developer.salesforce.com/page/Getting_Started`.

Standards Compliance

SOAP API is implemented to comply with the following specifications:

Standard Name	Website
Simple Object Access Protocol (SOAP) 1.1	
Web Service Description Language (WSDL) 1.1	`http://www.w3.org/TR/2001/NOTE-wsdl-20010315`
WS-I Basic Profile 1.1	`http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html`

Development Platforms

SOAP API works with current SOAP development environments, including, but not limited to, Visual Studio .NET 2005. In this document, we provide examples in Java and C# (.NET). The Java examples are based on WSC 20.0 (WSC) and JDK 6 (Java Platform Standard Edition Development Kit 6). Additional versions of WSC are available at `https://github.com/forcedotcom/wsc` and `http://mvnrepository.com/artifact/com.force.api/force-wsc`. To see a complete list of compatible development platforms and more sample code, go to developer.salesforce.com.

Note: Development platforms vary in their SOAP implementations. Implementation differences in certain development platforms might prevent access to some or all of the features in the API. If you are using Visual Studio for .NET development, we recommend that you use Visual Studio 2003 or higher.

SOAP API Support Policy

Salesforce recommends that your new client applications use the most recent version of the Lightning Platform WSDL file to fully exploit the benefits of richer features and greater efficiency. You can navigate to the most recent WSDL for your organization from Setup by entering *API* in the Quick Find box, then selecting **API**. When a new version is released, use the following steps in Quick Start to update your WSDL:

- Regenerate the WSDL file (see Step 2: Generate or Obtain the Web Service WSDL)
- Import it into your environment (see Step 3: Import the WSDL File Into Your Development Platform)

Backward Compatibility

Salesforce strives to make backward compatibility easy when using the Lightning platform.

Each new Salesforce release consists of two components:

- A new release of platform software that resides on Salesforce systems
- A new version of SOAP API

For example, the Winter '07 release included SOAP API version 9.0 and the Summer '07 release included SOAP API version 10.0.

We maintain support for each SOAP API version across releases of the platform software. SOAP API is backward compatible in that an application created to work with a given SOAP API version will continue to work with that same SOAP API version in future platform software releases.

Salesforce does not guarantee that an application written against one SOAP API version will work with future SOAP API versions: Changes in method signatures and data representations are often required as we continue to enhance SOAP API. However, we strive to keep SOAP API consistent from version to version with minimal if any changes required to port applications to newer SOAP API versions.

For example, an application written using SOAP API version 9.0 which shipped with the Winter '07 release will continue to work with SOAP API version 9.0 on the Summer '07 release and on future releases beyond that. However, that same application may not work with SOAP API version 10 without modifications to the application.

SOAP API End-of-Life

Salesforce is committed to supporting each SOAP API version for a minimum of three years from the date of first release. In order to improve the quality and performance of SOAP API, versions that are more than three years old may cease to be supported.

When a SOAP API version is scheduled to be unsupported, an advance end-of-life notice will be given at least one year before support for SOAP API version is ended. Salesforce will directly notify customers using SOAP API versions scheduled for end of life.

Choosing a WSDL

There are two Lightning Platform Web services for which you can obtain WSDL files for API access:

- **Lightning Platform Enterprise WSDL**—This API is for most enterprise users who are developing client applications for their organization. The enterprise WSDL file is a strongly typed representation of your organization's data. It provides information about your schema, data types, and fields to your development environment, allowing for a tighter integration between it and the Lightning Platform Web service. This WSDL changes if custom fields or custom objects are added to, renamed, or removed from, your organization's Salesforce configuration. If you are downloading an enterprise WSDL and you have managed packages installed in your organization, you need to take an extra step to select the version of each installed package to include in the generated WSDL.

  Note the following when generating the enterprise WSDL:

  - If new custom fields or objects are added to, renamed, or removed from your organization's information, you need to regenerate the WSDL file in order to access them.
  - The generated WSDL contains the objects and fields in your organization, including those available in the selected versions of each installed package. If a field or object is added in a later package version, you must generate the enterprise WSDL with that package version to work with the object or field in your API integration.

- **Lightning Platform Partner WSDL**—This API is for Salesforce partners who are developing client applications for multiple organizations. As a loosely-typed representation of the Salesforce object model, the partner WSDL can be used to access data within any organization.

Related Resources

The Salesforce developer website provides a full suite of developer toolkits, sample code, sample SOAP messages, community-based support, and other resources to help you with your development projects. Be sure to visit `https://developer.salesforce.com/page/Getting_Started` for more information, or visit `https://developer.salesforce.com/signup` to sign up for a free Developer Edition account.

You can visit these websites to find out more about Salesforce applications:

- Salesforce for information about the Salesforce application.
- Salesforce AppExchange for access to apps created for Salesforce.
- Salesforce.com Community for services to ensure Salesforce customer success.

Quick Start

Use this quick start to create a sample application in your development environment.

Note: Before you begin building an integration or other client application:

- Install your development platform according to its product documentation.
- Read through all the steps before beginning this quick start. You may also wish to review the rest of this document to familiarize yourself with terms and concepts.

Step 1: Obtain a Salesforce Developer Edition Organization

If you are not already a member of the Lightning Platform developer community, go to `developer.salesforce.com/signup` and follow the instructions for signing up for a Developer Edition organization. Even if you already have Enterprise Edition, Unlimited Edition, or Performance Edition, use Developer Edition for developing, staging, and testing your solutions against sample data to protect your organization's live data. This is especially true for applications that insert, update, or delete data (as opposed to simply reading data).

If you already have a Developer Edition organization, verify that you have the API Enabled permission. This permission is enabled by default, but may have been changed by an administrator. For more information, see the help in the Salesforce user interface.

Step 2: Generate or Obtain the Web Service WSDL

To access the Lightning Platform Web service, you need a Web Service Description Language (WSDL) file. The WSDL file defines the Web service that is available to you. Your development platform uses this WSDL to generate an API to access the Lightning Platform Web service it defines. You can either obtain the WSDL file from your organization's Salesforce administrator or you can generate it yourself if you have access to the WSDL download page in the Salesforce user interface. You can navigate to the most recent WSDL for your organization from Setup by entering *API* in the Quick Find box, then selecting **API**.

For more information about WSDL, see `http://www.w3.org/TR/wsdl`.

Generating the WSDL File for Your Organization

Any user with the Modify All Data permission can download the Web Services Description Language (WSDL) file to integrate and extend Salesforce using the API. (The System Administrator profile has this permission.)

The WSDL file is dynamically generated based on which type of WSDL file (enterprise or partner) you download. The generated WSDL defines all of the API calls, objects (including standard and custom objects), and fields that are available for API access for your organization.

To generate the WSDL file for your organization:

1. Log in to your Enterprise, Unlimited, Performance, or Developer Edition Salesforce account. You must log in as an administrator or as a user who has the "Modify All Data" permission. Logins are checked to ensure they are from a known IP address. For more information, see "Restrict Where and When Users Can Log In to Salesforce" in the Salesforce online help.
2. From Setup, enter *API* in the Quick Find box, then select **API** to display the WSDL download page.
3. Download the appropriate WSDL:
   - If you're downloading an enterprise WSDL and you have managed packages installed in your org, click **Generate Enterprise WSDL**. Salesforce prompts you to select the version of each installed package to include in the generated WSDL.
   - Otherwise, right-click the link for the appropriate WSDL document to save it to a local directory. In the menu, Internet Explorer users can choose **Save Target As**, while Mozilla Firefox users can choose **Save Link As**.

Step 3: Import the WSDL File Into Your Development Platform

Once you have the WSDL file, you need to import it into your development platform so that your development environment can generate the necessary objects for use in building client Web service applications in that environment. This section provides sample instructions for WSC and Microsoft Visual Studio. For instructions about other development platforms, see your platform's product documentation.

Note: The process for importing WSDL files is identical for the enterprise and partner WSDL files.

Instructions for Java Environments (WSC)

Java environments access the API through Java objects that serve as proxies for their server-side counterparts. Before using the API, you must first generate these objects from your organization's WSDL file.

Each SOAP client has its own tool for this process. For WSC, use the `wsdlc` utility.

Note: Before you run `wsdlc`, you must have the WSC JAR file installed on your system and referenced in your classpath.

The basic syntax for `wsdlc` is:

```
java -classpath pathToJAR/wsc-22.jar com.sforce.ws.tools.wsdlc pathToWsdl/WsdlFilename
pathToOutputJar/OutputJarFilename
```

This command generates an output jar file based on the specified WSDL file. After the output jar file is created, reference it along with the wsc jar file (for example, wsc-22.jar) in your Java program to create a client application.

Instructions for Microsoft Visual Studio

Visual Studio languages access the API through objects that serve as proxies for their server-side counterparts. Before using the API, you must first generate these objects from your organization's WSDL file.

Once you have the proxy classes for the server-side objects, you need to ensure that you specify whether you have set any values on non-string fields. For more information, see Implementation Considerations.

Visual Studio provides two approaches for importing your WSDL file and generating an XML Web service client: an IDE-based approach and a command line approach. This walkthrough describes how to import your WSDL file through the IDE.

Note: Before you begin, the first step is to create a new application or open an existing application in Visual Studio. In addition, you need to have generated the WSDL file, as described in Generating the WSDL File for Your Organization.

An XML Web service client is any component or application that references and uses an XML Web service. This does not necessarily need to be a client-based application. In fact, in many cases, your XML Web service clients might be other Web applications, such as Web Forms or even other XML Web services. When accessing XML Web services in managed code, a proxy class and the .NET Framework handle all of the infrastructure coding.

To access an XML Web service from managed code:

1. Name your project `Walkthrough` or change the `using` directive in the following sample to *`your_project_name.web_reference_name`*. Then, add a Web reference to your project for the XML Web service that you want to access. The Web reference creates a proxy class with methods that serve as proxies for each exposed method of the XML Web service.
2. Add the namespace for the Web reference.
3. Create an instance of the proxy class and then access the methods of that class as you would the methods of any other class.

You can add either a .NET 2.0 style Web reference, or a .NET 3.0 style Service reference, depending on your version of Visual Studio and preferred developer environment. A .NET 3.0 style reference uses services like SoapClient instead of SforceService.

To add a Web reference:

Note: These steps may be different depending on the version of Visual Studio that you're using. For more information, see "Adding and Removing Web References" in the Visual Studio documentation.

1. If you are using Visual Studio 2010 or earlier, on the Project menu, choose **Add Web Reference.** For later versions of Visual Studio, on the Project menu, choose **Add Service Reference**, select **Advanced** and then select **Add Web Reference**.
2. In the URL box of the Add Web Reference dialog box, type the URL to obtain the service description of the XML Web service you want to access, such as:

   ```
   c:\WSDLFiles\enterprise.wsdl
   ```

3. Click **Go** to retrieve information about the XML Web service.
4. In the Web reference name box, rename the Web reference to `sforce`, which is the name you will use for this Web reference.
5. Click **Add Reference** to add a Web reference for the target XML Web service.
6. Visual Studio retrieves the service description and generates a proxy class to interface between your application and the XML Web service.

Note: If you are using Visual Basic .Net 1.1 and the enterprise WSDL, you will need to modify the generated Web service client to overcome a bug in Visual Studio's client generation utility. The API exposes two objects (Case and Event) whose names conflict with Visual Basic keywords. When the classes that represent these objects are created, Visual Studio wraps the class names with brackets (`[Case]` and `[Event]`). This is the method by which you can reuse keywords.

Unfortunately, in the definition of the `sObject` class, Visual Studio does not wrap Case and Event to class references in the `System.Xml.Serialization.XmlIncludeAttribute` that are part of the `sObject` definition. To work around this problem in Visual Studio, you need to edit the `XmlIncludeAttribute` settings for Case and Event as shown below. This does not apply to C# and only applies when using the enterprise version of the WSDL.

```
    System.Xml.Serialization.XmlIncludeAttribute(GetType([Event])), _

    System.Xml.Serialization.XmlIncludeAttribute(GetType([Case])), _
```

Step 4: Walk Through the Sample Code

Once you have imported your WSDL file, you can begin building client applications that use the API. Use the following samples to create a basic client application. Comments embedded in the sample explain each section of code.

Java Sample Code

This section walks through a sample Java client application that uses the WSC SOAP client. The purpose of this sample application is to show the required steps for logging into the login server and to demonstrate the invocation and subsequent handling of several API calls.

To run this sample, you must pass the authentication endpoint URL as an argument for your program. You can obtain this URL from the WSDL file. This sample application performs the following main tasks:

1. Prompts the user for their Salesforce username and password.
2. Calls `login()` to log in to the single login server and, if the login succeeds, retrieves user information and writes it to the console along with session information.

3. Calls `describeGlobal()` to retrieve a list of all available objects for the organization's data. The `describeGlobal` method determines the objects that are available to the logged in user. This call should not be made more than once per session, since the data returned from the call is not likely to change frequently. The DescribeGlobalResult is echoed to the console.
4. Calls `describeSObjects()` to retrieve metadata (field list and object properties) for a specified object. The `describeSObject` method illustrates the type of metadata information that can be obtained for each object available to the user. The sample client application executes a `describeSObjects()` call on the object that the user specifies and then echoes the returned metadata information to the console. Object metadata information includes permissions, field types and lengths, and available values for picklist fields and types for `referenceTo` fields.
5. Calls `query()`, passing a simple query string `("SELECT FirstName, LastName FROM Contact")`, and iterating through the returned QueryResult.
6. Calls `logout()` to the log the user out.

The following sample code uses try/catch blocks to handle exceptions that might be thrown by the API calls.

```
package com.example.samples;

import java.io.BufferedReader;
import java.io.FileNotFoundException;
import java.io.InputStreamReader;
import java.io.IOException;
import com.sforce.soap.enterprise.DeleteResult;
import com.sforce.soap.enterprise.DescribeGlobalResult;
import com.sforce.soap.enterprise.DescribeGlobalSObjectResult;
import com.sforce.soap.enterprise.DescribeSObjectResult;
import com.sforce.soap.enterprise.EnterpriseConnection;
import com.sforce.soap.enterprise.Error;
import com.sforce.soap.enterprise.Field;
import com.sforce.soap.enterprise.FieldType;
import com.sforce.soap.enterprise.GetUserInfoResult;
import com.sforce.soap.enterprise.LoginResult;
import com.sforce.soap.enterprise.PicklistEntry;
import com.sforce.soap.enterprise.QueryResult;
import com.sforce.soap.enterprise.SaveResult;
import com.sforce.soap.enterprise.sobject.Account;
import com.sforce.soap.enterprise.sobject.Contact;
import com.sforce.soap.enterprise.sobject.SObject;
import com.sforce.ws.ConnectorConfig;
import com.sforce.ws.ConnectionException;

public class QuickstartApiSample {

   private static BufferedReader reader = new BufferedReader(
         new InputStreamReader(System.in));

   EnterpriseConnection connection;
   String authEndPoint = "";

   public static void main(String[] args) {
      if (args.length < 1) {
         System.out.println("Usage: com.example.samples."
               + "QuickstartApiSamples <AuthEndPoint>");

         System.exit(-1);
```

```
    }

    QuickstartApiSample sample = new QuickstartApiSample(args[0]);
    sample.run();
  }

  public void run() {
    // Make a login call
    if (login()) {
      // Do a describe global
      describeGlobalSample();

      // Describe an object
      describeSObjectsSample();

      // Retrieve some data using a query
      querySample();

      // Log out
      logout();
    }
  }

  // Constructor
  public QuickstartApiSample(String authEndPoint) {
    this.authEndPoint = authEndPoint;
  }

  private String getUserInput(String prompt) {
    String result = "";
    try {
      System.out.print(prompt);
      result = reader.readLine();
    } catch (IOException ioe) {
      ioe.printStackTrace();
    }

    return result;
  }

  private boolean login() {
    boolean success = false;
    String username = getUserInput("Enter username: ");
    String password = getUserInput("Enter password: ");

    try {
      ConnectorConfig config = new ConnectorConfig();
      config.setUsername(username);
      config.setPassword(password);

      System.out.println("AuthEndPoint: " + authEndPoint);
      config.setAuthEndpoint(authEndPoint);

      connection = new EnterpriseConnection(config);
```

```
         printUserInfo(config);

         success = true;
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }

      return success;
   }

   private void printUserInfo(ConnectorConfig config) {
      try {
         GetUserInfoResult userInfo = connection.getUserInfo();

         System.out.println("\nLogging in ...\n");
         System.out.println("UserID: " + userInfo.getUserId());
         System.out.println("User Full Name: " + userInfo.getUserFullName());
         System.out.println("User Email: " + userInfo.getUserEmail());
         System.out.println();
         System.out.println("SessionID: " + config.getSessionId());
         System.out.println("Auth End Point: " + config.getAuthEndpoint());
         System.out
               .println("Service End Point: " + config.getServiceEndpoint());
         System.out.println();
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }
   }

   private void logout() {
      try {
         connection.logout();
         System.out.println("Logged out.");
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }
   }

   /**
    * To determine the objects that are available to the logged-in user, the
    * sample client application executes a describeGlobal call, which returns
    * all of the objects that are visible to the logged-in user. This call
    * should not be made more than once per session, as the data returned from
    * the call likely does not change frequently. The DescribeGlobalResult is
    * simply echoed to the console.
    */
   private void describeGlobalSample() {
      try {
         // describeGlobal() returns an array of object results that
         // includes the object names that are available to the logged-in user.
         DescribeGlobalResult dgr = connection.describeGlobal();

         System.out.println("\nDescribe Global Results:\n");
         // Loop through the array echoing the object names to the console
```

```
         for (int i = 0; i < dgr.getSobjects().length; i++) {
            System.out.println(dgr.getSobjects()[i].getName());
         }
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }
   }

   /**
    * The following method illustrates the type of metadata information that can
    * be obtained for each object available to the user. The sample client
    * application executes a describeSObject call on a given object and then
    * echoes the returned metadata information to the console. Object metadata
    * information includes permissions, field types and length and available
    * values for picklist fields and types for referenceTo fields.
    */
   private void describeSObjectsSample() {
      String objectToDescribe = getUserInput("\nType the name of the object to "
            + "describe (try Account): ");

      try {
         // Call describeSObjects() passing in an array with one object type
         // name
         DescribeSObjectResult[] dsrArray = connection
               .describeSObjects(new String[] { objectToDescribe });

         // Since we described only one sObject, we should have only
         // one element in the DescribeSObjectResult array.
         DescribeSObjectResult dsr = dsrArray[0];

         // First, get some object properties
         System.out.println("\n\nObject Name: " + dsr.getName());

         if (dsr.getCustom())
            System.out.println("Custom Object");
         if (dsr.getLabel() != null)
            System.out.println("Label: " + dsr.getLabel());

         // Get the permissions on the object

         if (dsr.getCreateable())
            System.out.println("Createable");
         if (dsr.getDeletable())
            System.out.println("Deleteable");
         if (dsr.getQueryable())
            System.out.println("Queryable");
         if (dsr.getReplicateable())
            System.out.println("Replicateable");
         if (dsr.getRetrieveable())
            System.out.println("Retrieveable");
         if (dsr.getSearchable())
            System.out.println("Searchable");
         if (dsr.getUndeletable())
            System.out.println("Undeleteable");
```

```
      if (dsr.getUpdateable())
         System.out.println("Updateable");

      System.out.println("Number of fields: " + dsr.getFields().length);

      // Now, retrieve metadata for each field
      for (int i = 0; i < dsr.getFields().length; i++) {
         // Get the field
         Field field = dsr.getFields()[i];

         // Write some field properties
         System.out.println("Field name: " + field.getName());
         System.out.println("\tField Label: " + field.getLabel());

         // This next property indicates that this
         // field is searched when using
         // the name search group in SOSL
         if (field.getNameField())
            System.out.println("\tThis is a name field.");

         if (field.getRestrictedPicklist())
            System.out.println("This is a RESTRICTED picklist field.");

         System.out.println("\tType is: " + field.getType());

         if (field.getLength() > 0)
            System.out.println("\tLength: " + field.getLength());

         if (field.getScale() > 0)
            System.out.println("\tScale: " + field.getScale());

         if (field.getPrecision() > 0)
            System.out.println("\tPrecision: " + field.getPrecision());

         if (field.getDigits() > 0)
            System.out.println("\tDigits: " + field.getDigits());

         if (field.getCustom())
            System.out.println("\tThis is a custom field.");

         // Write the permissions of this field
         if (field.getNillable())
            System.out.println("\tCan be nulled.");
         if (field.getCreateable())
            System.out.println("\tCreateable");
         if (field.getFilterable())
            System.out.println("\tFilterable");
         if (field.getUpdateable())
            System.out.println("\tUpdateable");

         // If this is a picklist field, show the picklist values
         if (field.getType().equals(FieldType.picklist)) {
            System.out.println("\t\tPicklist values: ");
            PicklistEntry[] picklistValues = field.getPicklistValues();
```

```
            for (int j = 0; j < field.getPicklistValues().length; j++) {
               System.out.println("\t\tValue: "
                     + picklistValues[j].getValue());
            }
         }

         // If this is a foreign key field (reference),
         // show the values
         if (field.getType().equals(FieldType.reference)) {
            System.out.println("\tCan reference these objects:");
            for (int j = 0; j < field.getReferenceTo().length; j++) {
               System.out.println("\t\t" + field.getReferenceTo()[j]);
            }
         }
         System.out.println("");
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}

private void querySample() {
   String soqlQuery = "SELECT FirstName, LastName FROM Contact";
   try {
      QueryResult qr = connection.query(soqlQuery);
      boolean done = false;

      if (qr.getSize() > 0) {
         System.out.println("\nLogged-in user can see "
               + qr.getRecords().length + " contact records.");

         while (!done) {
            System.out.println("");
            SObject[] records = qr.getRecords();
            for (int i = 0; i < records.length; ++i) {
               Contact con = (Contact) records[i];
               String fName = con.getFirstName();
               String lName = con.getLastName();

               if (fName == null) {
                  System.out.println("Contact " + (i + 1) + ": " + lName);
               } else {
                  System.out.println("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }

            if (qr.isDone()) {
               done = true;
            } else {
               qr = connection.queryMore(qr.getQueryLocator());
            }
         }
```

```
            } else {
               System.out.println("No records found.");
            }
         } catch (ConnectionException ce) {
            ce.printStackTrace();
         }
      }
}
```

C# Sample Code

This section walks through a sample C# client application. The purpose of this sample application is to show the required steps for logging in and to demonstrate the invocation and subsequent handling of several API calls.

This sample application performs the following main tasks:

1. Prompts the user for their Salesforce username and password.
2. Calls `login()` to log in to the single login server and, if the login succeeds:
   - Sets the returned `sessionId` into the session header, which is required for session authentication on subsequent API calls.
   - Resets the Lightning Platform endpoint to the returned `serverUrl`, which is the target of subsequent API calls.

     All client applications that access the API must complete the tasks in this step before attempting any subsequent API calls.
   - Retrieves user information and writes it to the console along with session information.
3. Calls `describeGlobal()` to retrieve a list of all available objects for the organization's data. The `describeGlobal` method determines the objects that are available to the logged in user. This call should not be made more than once per session, since the data returned from the call is not likely to change frequently. The DescribeGlobalResult is echoed to the console.
4. Calls `describeSObjects()` to retrieve metadata (field list and object properties) for a specified object. The `describeSObject` method illustrates the type of metadata information that can be obtained for each object available to the user. The sample client application executes a `describeSObjects()` call on the object that the user specifies and then echoes the returned metadata information to the console. Object metadata information includes permissions, field types and lengths, and available values for picklist fields and types for `referenceTo` fields.
5. Calls `query()`, passing a simple query string `("SELECT FirstName, LastName FROM Contact")`, and iterating through the returned QueryResult.
6. Calls `logout()` to the log the user out.

The following sample code uses try/catch blocks to handle exceptions that might be thrown by the API calls.

The following code begins the sample C# client application.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Web.Services.Protocols;
using Walkthrough.sforce;

namespace Walkthrough
{

   class QuickstartApiSample
   {
```

```
    private SforceService binding;

    [STAThread]
    static void Main(string[] args)
    {
       QuickstartApiSample sample = new QuickstartApiSample();
       sample.run();
    }

    public void run()
    {
       // Make a login call
       if (login())
       {
          // Do a describe global
          describeGlobalSample();

          // Describe an account object
          describeSObjectsSample();

          // Retrieve some data using a query
          querySample();

          // Log out
          logout();
       }
    }

    private bool login()
    {
       Console.Write("Enter username: ");
       string username = Console.ReadLine();
       Console.Write("Enter password: ");
       string password = Console.ReadLine();

       // Create a service object
       binding = new SforceService();

       // Timeout after a minute
       binding.Timeout = 60000;

       // Try logging in
       LoginResult lr;
       try
       {

          Console.WriteLine("\nLogging in...\n");
          lr = binding.login(username, password);
       }

       // ApiFault is a proxy stub generated from the WSDL contract when
       // the web service was imported
       catch (SoapException e)
       {
```

```
            // Write the fault code to the console
            Console.WriteLine(e.Code);

            // Write the fault message to the console
            Console.WriteLine("An unexpected error has occurred: " + e.Message);

            // Write the stack trace to the console
            Console.WriteLine(e.StackTrace);

            // Return False to indicate that the login was not successful
            return false;
        }



        // Check if the password has expired
        if (lr.passwordExpired)
        {
            Console.WriteLine("An error has occurred. Your password has expired.");
            return false;
        }


        /** Once the client application has logged in successfully, it will use
         * the results of the login call to reset the endpoint of the service
         * to the virtual server instance that is servicing your organization
         */
        // Save old authentication end point URL
        String authEndPoint = binding.Url;
        // Set returned service endpoint URL
        binding.Url = lr.serverUrl;

        /** The sample client application now has an instance of the SforceService
         * that is pointing to the correct endpoint. Next, the sample client
         * application sets a persistent SOAP header (to be included on all
         * subsequent calls that are made with SforceService) that contains the
         * valid sessionId for our login credentials. To do this, the sample
         * client application creates a new SessionHeader object and persist it to
         * the SforceService. Add the session ID returned from the login to the
         * session header
         */
        binding.SessionHeaderValue = new SessionHeader();
        binding.SessionHeaderValue.sessionId = lr.sessionId;

        printUserInfo(lr, authEndPoint);

        // Return true to indicate that we are logged in, pointed
        // at the right URL and have our security token in place.
        return true;
    }

    private void printUserInfo(LoginResult lr, String authEP)
    {
        try
```

```
            {
               GetUserInfoResult userInfo = lr.userInfo;

               Console.WriteLine("\nLogging in ...\n");
               Console.WriteLine("UserID: " + userInfo.userId);
               Console.WriteLine("User Full Name: " +
                   userInfo.userFullName);
               Console.WriteLine("User Email: " +
                   userInfo.userEmail);
               Console.WriteLine();
               Console.WriteLine("SessionID: " +
                   lr.sessionId);
               Console.WriteLine("Auth End Point: " +
                   authEP);
               Console.WriteLine("Service End Point: " +
                   lr.serverUrl);
               Console.WriteLine();
            }
            catch (SoapException e)
            {
               Console.WriteLine("An unexpected error has occurred: " + e.Message +
                   " Stack trace: " + e.StackTrace);
            }
         }

         private void logout()
         {
            try
            {
               binding.logout();
               Console.WriteLine("Logged out.");
            }
            catch (SoapException e)
            {
               // Write the fault code to the console
               Console.WriteLine(e.Code);

               // Write the fault message to the console
               Console.WriteLine("An unexpected error has occurred: " + e.Message);

               // Write the stack trace to the console
               Console.WriteLine(e.StackTrace);
            }
         }

         /**
         * To determine the objects that are available to the logged-in
         * user, the sample client application executes a describeGlobal
         * call, which returns all of the objects that are visible to
         * the logged-in user. This call should not be made more than
         * once per session, as the data returned from the call likely
         * does not change frequently. The DescribeGlobalResult is
         * simply echoed to the console.
         */
```

```
private void describeGlobalSample()
{
   try
   {
      // describeGlobal() returns an array of object results that
      // includes the object names that are available to the logged-in user.
      DescribeGlobalResult dgr = binding.describeGlobal();

      Console.WriteLine("\nDescribe Global Results:\n");
      // Loop through the array echoing the object names to the console

      for (int i = 0; i < dgr.sobjects.Length; i++)
      {
         Console.WriteLine(dgr.sobjects[i].name);
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An exception has occurred: " + e.Message +
          "\nStack trace: " + e.StackTrace);
   }
}

/**
* The following method illustrates the type of metadata
* information that can be obtained for each object available
* to the user. The sample client application executes a
* describeSObject call on a given object and then echoes
* the returned metadata information to the console. Object
* metadata information includes permissions, field types
* and length and available values for picklist fields
* and types for referenceTo fields.
*/
private void describeSObjectsSample()
{
   Console.Write("\nType the name of the object to " +
       "describe (try Account): ");
   string objectType = Console.ReadLine();
   try
   {

      // Call describeSObjects() passing in an array with one object type name
      DescribeSObjectResult[] dsrArray =
            binding.describeSObjects(new string[] { objectType });

      // Since we described only one sObject, we should have only
      // one element in the DescribeSObjectResult array.
      DescribeSObjectResult dsr = dsrArray[0];

      // First, get some object properties
      Console.WriteLine("\n\nObject Name: " + dsr.name);

      if (dsr.custom) Console.WriteLine("Custom Object");
      if (dsr.label != null) Console.WriteLine("Label: " + dsr.label);
```

```
            // Get the permissions on the object
            if (dsr.createable) Console.WriteLine("Createable");
            if (dsr.deletable) Console.WriteLine("Deleteable");
            if (dsr.queryable) Console.WriteLine("Queryable");
            if (dsr.replicateable) Console.WriteLine("Replicateable");
            if (dsr.retrieveable) Console.WriteLine("Retrieveable");
            if (dsr.searchable) Console.WriteLine("Searchable");
            if (dsr.undeletable) Console.WriteLine("Undeleteable");
            if (dsr.updateable) Console.WriteLine("Updateable");

            Console.WriteLine("Number of fields: " + dsr.fields.Length);

            // Now, retrieve metadata for each field
            for (int i = 0; i < dsr.fields.Length; i++)
            {
               // Get the field
               Field field = dsr.fields[i];

               // Write some field properties
               Console.WriteLine("Field name: " + field.name);
               Console.WriteLine("\tField Label: " + field.label);

               // This next property indicates that this
               // field is searched when using
               // the name search group in SOSL
               if (field.nameField)
                  Console.WriteLine("\tThis is a name field.");

               if (field.restrictedPicklist)
                  Console.WriteLine("This is a RESTRICTED picklist field.");

               Console.WriteLine("\tType is: " + field.type.ToString());

               if (field.length > 0)
                  Console.WriteLine("\tLength: " + field.length);

               if (field.scale > 0)
                  Console.WriteLine("\tScale: " + field.scale);

               if (field.precision > 0)
                  Console.WriteLine("\tPrecision: " + field.precision);

               if (field.digits > 0)
                  Console.WriteLine("\tDigits: " + field.digits);

               if (field.custom)
                  Console.WriteLine("\tThis is a custom field.");

               // Write the permissions of this field
               if (field.nillable) Console.WriteLine("\tCan be nulled.");
               if (field.createable) Console.WriteLine("\tCreateable");
               if (field.filterable) Console.WriteLine("\tFilterable");
               if (field.updateable) Console.WriteLine("\tUpdateable");
```

```
                // If this is a picklist field, show the picklist values
                if (field.type.Equals(fieldType.picklist))
                {
                    Console.WriteLine("\tPicklist Values");
                    for (int j = 0; j < field.picklistValues.Length; j++)
                        Console.WriteLine("\t\t" + field.picklistValues[j].value);
                }

                // If this is a foreign key field (reference),
                // show the values
                if (field.type.Equals(fieldType.reference))
                {
                    Console.WriteLine("\tCan reference these objects:");
                    for (int j = 0; j < field.referenceTo.Length; j++)
                        Console.WriteLine("\t\t" + field.referenceTo[j]);
                }
                Console.WriteLine("");
            }
        }
        catch (SoapException e)
        {
            Console.WriteLine("An exception has occurred: " + e.Message +
                "\nStack trace: " + e.StackTrace);
        }
        Console.WriteLine("Press ENTER to continue...");
        Console.ReadLine();
    }

    private void querySample()
    {
        String soqlQuery = "SELECT FirstName, LastName FROM Contact";
        try
        {
            QueryResult qr = binding.query(soqlQuery);
            bool done = false;

            if (qr.size > 0)
            {
                Console.WriteLine("Logged-in user can see "
                    + qr.records.Length + " contact records.");

                while (!done)
                {
                    Console.WriteLine("");
                    sObject[] records = qr.records;
                    for (int i = 0; i < records.Length; i++)
                    {
                        Contact con = (Contact)records[i];
                        string fName = con.FirstName;
                        string lName = con.LastName;
                        if (fName == null)
                            Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                        else
```

```
                        Console.WriteLine("Contact " + (i + 1) + ": " + fName
                               + " " + lName);
                  }

                  if (qr.done)
                  {
                     done = true;
                  }
                  else
                  {
                     qr = binding.queryMore(qr.queryLocator);
                  }
               }
            }
            else
            {
               Console.WriteLine("No records found.");
            }
         }
         catch (Exception ex)
         {
            Console.WriteLine("\nFailed to execute query succesfully," +
                "error message was: \n{0}", ex.Message);
         }
         Console.WriteLine("\nPress ENTER to continue...");
         Console.ReadLine();
      }
   }
}
```

The following C# example is the same as the previous C# example, except it uses .NET 3.0 SoapClient services instead of .NET 2.0 SforceService services.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

using System.ServiceModel;
using Walkthrough.sforce;

namespace Walkthrough
{
    class QuickstartApiSample
    {
        private static SoapClient loginClient; // for login endpoint
        private static SoapClient client; // for API endpoint
        private static SessionHeader header;
        private static EndpointAddress endpoint;

        static void Main(string[] args)
        {
            QuickstartApiSample sample = new QuickstartApiSample();
            sample.run();
```

```
        }

        public void run()
        {
            // Make a login call
            if (login())
            {
                // Do a describe global
                describeGlobalSample();

                // Describe an account object
                describeSObjectsSample();

                // Retrieve some data using a query
                querySample();

                // Log out
                logout();
            }
        }

        private bool login()
        {
            Console.Write("Enter username: ");
            string username = Console.ReadLine();
            Console.Write("Enter password: ");
            string password = Console.ReadLine();

            // Create a SoapClient specifically for logging in
            loginClient = new SoapClient();

            // (combine pw and token if necessary)
            LoginResult lr;
            try
            {
                Console.WriteLine("\nLogging in...\n");
                lr = loginClient.login(null, username, password);
            }
            catch (Exception e)
            {
                // Write the fault message to the console
                Console.WriteLine("An unexpected error has occurred: " + e.Message);

                // Write the stack trace to the console
                Console.WriteLine(e.StackTrace);
                return false;
            }

            // Check if the password has expired
            if (lr.passwordExpired)
            {
                Console.WriteLine("An error has occurred. Your password has expired.");
                return false;
            }
```

```
        /** Once the client application has logged in successfully, it will use
         * the results of the login call to reset the endpoint of the service
         * to the virtual server instance that is servicing your organization
         */

        // On successful login, cache session info and API endpoint info
        endpoint = new EndpointAddress(lr.serverUrl);

        /** The sample client application now has a cached EndpointAddress
        * that is pointing to the correct endpoint. Next, the sample client
        * application sets a persistent SOAP header that contains the
        * valid sessionId for our login credentials. To do this, the sample
        * client application creates a new SessionHeader object. Add the session
        * ID returned from the login to the session header
        */
        header = new SessionHeader();
        header.sessionId = lr.sessionId;

        // Create and cache an API endpoint client
        client = new SoapClient("Soap", endpoint);

        printUserInfo(lr, lr.serverUrl);

        // Return true to indicate that we are logged in, pointed
        // at the right URL and have our security token in place.
        return true;
    }

    private void printUserInfo(LoginResult lr, String authEP)
    {
        try
        {
            GetUserInfoResult userInfo = lr.userInfo;

            Console.WriteLine("\nLogging in ...\n");
            Console.WriteLine("UserID: " + userInfo.userId);
            Console.WriteLine("User Full Name: " +
                userInfo.userFullName);
            Console.WriteLine("User Email: " +
                userInfo.userEmail);
            Console.WriteLine();
            Console.WriteLine("SessionID: " +
                lr.sessionId);
            Console.WriteLine("Auth End Point: " +
                authEP);
            Console.WriteLine("Service End Point: " +
                lr.serverUrl);
            Console.WriteLine();
        }
        catch (Exception e)
        {
            Console.WriteLine("An unexpected error has occurred: " + e.Message +
                " Stack trace: " + e.StackTrace);
```

```
        }
    }

    private void logout()
    {
        try
        {
            client.logout(header);
            Console.WriteLine("Logged out.");
        }
        catch (Exception e)
        {
            // Write the fault message to the console
            Console.WriteLine("An unexpected error has occurred: " + e.Message);

            // Write the stack trace to the console
            Console.WriteLine(e.StackTrace);
        }
    }

    /**
    * To determine the objects that are available to the logged-in
    * user, the sample client application executes a describeGlobal
    * call, which returns all of the objects that are visible to
    * the logged-in user. This call should not be made more than
    * once per session, as the data returned from the call likely
    * does not change frequently. The DescribeGlobalResult is
    * simply echoed to the console.
    */
    private void describeGlobalSample()
    {
        try
        {
            // describeGlobal() returns an array of object results that
            // includes the object names that are available to the logged-in user.
            DescribeGlobalResult dgr = client.describeGlobal(
                      header, // session header
                      null // package version header
                      );

            Console.WriteLine("\nDescribe Global Results:\n");
            // Loop through the array echoing the object names to the console

            for (int i = 0; i < dgr.sobjects.Length; i++)
            {
                Console.WriteLine(dgr.sobjects[i].name);
            }
        }
        catch (Exception e)
        {
            Console.WriteLine("An exception has occurred: " + e.Message +
                "\nStack trace: " + e.StackTrace);
        }
    }
```

```
/**
* The following method illustrates the type of metadata
* information that can be obtained for each object available
* to the user. The sample client application executes a
* describeSObject call on a given object and then echoes
* the returned metadata information to the console. Object
* metadata information includes permissions, field types
* and length and available values for picklist fields
* and types for referenceTo fields.
*/
private void describeSObjectsSample()
{
    Console.Write("\nType the name of the object to " +
         "describe (try Account): ");
    string objectType = Console.ReadLine();
    try
    {

        // Call describeSObjects() passing in an array with one object type name

        DescribeSObjectResult[] dsrArray =
              client.describeSObjects(
                header, // session header
                null, // package version header
                null, // locale options
                new string[] { objectType } // object name array
                );

        // Since we described only one sObject, we should have only
        // one element in the DescribeSObjectResult array.
        DescribeSObjectResult dsr = dsrArray[0];

        // First, get some object properties
        Console.WriteLine("\n\nObject Name: " + dsr.name);

        if (dsr.custom) Console.WriteLine("Custom Object");
        if (dsr.label != null) Console.WriteLine("Label: " + dsr.label);

        // Get the permissions on the object
        if (dsr.createable) Console.WriteLine("Createable");
        if (dsr.deletable) Console.WriteLine("Deleteable");
        if (dsr.queryable) Console.WriteLine("Queryable");
        if (dsr.replicateable) Console.WriteLine("Replicateable");
        if (dsr.retrieveable) Console.WriteLine("Retrieveable");
        if (dsr.searchable) Console.WriteLine("Searchable");
        if (dsr.undeletable) Console.WriteLine("Undeleteable");
        if (dsr.updateable) Console.WriteLine("Updateable");

        Console.WriteLine("Number of fields: " + dsr.fields.Length);

        // Now, retrieve metadata for each field
        for (int i = 0; i < dsr.fields.Length; i++)
        {
```

```
// Get the field
Field field = dsr.fields[i];

// Write some field properties
Console.WriteLine("Field name: " + field.name);
Console.WriteLine("\tField Label: " + field.label);

// This next property indicates that this
// field is searched when using
// the name search group in SOSL
if (field.nameField)
    Console.WriteLine("\tThis is a name field.");

if (field.restrictedPicklist)
    Console.WriteLine("This is a RESTRICTED picklist field.");

Console.WriteLine("\tType is: " + field.type.ToString());

if (field.length > 0)
    Console.WriteLine("\tLength: " + field.length);

if (field.scale > 0)
    Console.WriteLine("\tScale: " + field.scale);

if (field.precision > 0)
    Console.WriteLine("\tPrecision: " + field.precision);

if (field.digits > 0)
    Console.WriteLine("\tDigits: " + field.digits);

if (field.custom)
    Console.WriteLine("\tThis is a custom field.");

// Write the permissions of this field
if (field.nillable) Console.WriteLine("\tCan be nulled.");
if (field.createable) Console.WriteLine("\tCreateable");
if (field.filterable) Console.WriteLine("\tFilterable");
if (field.updateable) Console.WriteLine("\tUpdateable");

// If this is a picklist field, show the picklist values
if (field.type.Equals(fieldType.picklist))
{
    Console.WriteLine("\tPicklist Values");
    for (int j = 0; j < field.picklistValues.Length; j++)
        Console.WriteLine("\t\t" + field.picklistValues[j].value);
}

// If this is a foreign key field (reference),
// show the values
if (field.type.Equals(fieldType.reference))
{
    Console.WriteLine("\tCan reference these objects:");
    for (int j = 0; j < field.referenceTo.Length; j++)
        Console.WriteLine("\t\t" + field.referenceTo[j]);
```

```
                }
                Console.WriteLine("");
            }
        }
        catch (Exception e)
        {
            Console.WriteLine("An exception has occurred: " + e.Message +
                "\nStack trace: " + e.StackTrace);
        }
        Console.WriteLine("Press ENTER to continue...");
        Console.ReadLine();
    }

    private void querySample()
    {
        String soqlQuery = "SELECT FirstName, LastName FROM Contact";
        try
        {
            QueryResult qr = client.query(
                header, // session header
                null, // query options
                null, // mru options
                null, // package version header
                soqlQuery // query string
                );

            bool done = false;

            if (qr.size > 0)
            {
                Console.WriteLine("Logged-in user can see "
                    + qr.records.Length + " contact records.");

                while (!done)
                {
                    Console.WriteLine("");
                    sObject[] records = qr.records;
                    for (int i = 0; i < records.Length; i++)
                    {
                        Contact con = (Contact)records[i];
                        string fName = con.FirstName;
                        string lName = con.LastName;
                        if (fName == null)
                            Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                        else
                            Console.WriteLine("Contact " + (i + 1) + ": " + fName
                               + " " + lName);
                    }

                    if (qr.done)
                    {
                        done = true;
                    }
                    else
```

```
                        {
                            qr = client.queryMore(
                                    header, // session header
                                    null, // query options
                                    qr.queryLocator // query locator
                                    );
                        }
                    }
                }
                else
                {
                    Console.WriteLine("No records found.");
                }
            }
            catch (Exception ex)
            {
                Console.WriteLine("\nFailed to execute query succesfully," +
                    "error message was: \n{0}", ex.Message);
            }
            Console.WriteLine("\nPress ENTER to continue...");
            Console.ReadLine();
        }
    }
}
```

CHAPTER 2 Object Basics

In this chapter ...

Generally speaking, API objects represent database tables that contain your organization's information. For example, the central object in the Salesforce data model represents accounts—companies and organizations involved with your business, such as customers, partners, and competitors. The term "record" describes a particular occurrence of an object (such as a specific account like "IBM" or "United Airlines" that is represented by an Account object). A record is analogous to a row in a database table.

Objects already created for you by Salesforce are called standard objects. Objects you create in your organization are called custom objects. Objects you create that map to data stored outside your organization are called external objects.

While this document describes all of the objects available in the API, your applications work with only the objects that you are authorized to access. Programmatic access to objects is determined by the objects defined in your organization, your organization configuration, your user permissions and access settings (which are configured by your organization's system administrator), your data sharing model, and other factors related specifically to the object.

Most of the objects accessible through the API are read-write objects. However, there are a few objects that are read-only. This fact is noted in the description for the object.

Primitive Data Types

The API uses the following primitive data types:

Value	Details
base64	Base 64-encoded binary data. Fields of this type are used for storing binary files in Attachment records, Document records, and Scontrol records. In these objects, the `Body` or `Binary` field contains the (base64 encoded) data, while the `BodyLength` field defines the length of the data in the `Body` or `Binary` field. In the Document object, you can specify a URL to the document instead of storing the document directly in the record.
boolean	Boolean fields have one of these values: `true` (or 1), or `false` (or 0).
byte	A set of bits.
date	Date data. Fields of this type contain date values, such as `ActivityDate` in the Event object. Unlike dateTime fields, date fields contain no time value—the time portion of a date field is not relevant and is always set to midnight in the Coordinated Universal Time (UTC) time zone. If you specify a date value in a query, you can filter on date fields only.
dateTime	Date/time values (timestamps). Fields of this type handle date/time values (timestamps), such as `ActivityDateTime` in the Event object or the `CreatedDate`, `LastModifiedDate`, or `SystemModstamp` in many objects. Regular dateTime fields are full timestamps with a precision of one second. They are always transferred in the Coordinated Universal Time (UTC) time zone. In your client application, you might need to translate the timestamp to or from a local time zone. If you specify a dateTime value in a query, you can filter on dateTime fields only. Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation. Note: The Event object has a `DurationInMinutes` field that specifies the number of minutes for an event. Even though this is a temporal value, it is an integer type—not a dateTime type.
double	Double values. Fields of this type can contain fractional portions (digits to the right of the decimal place), such as `ConversionRate` in CurrencyType. In the API, all non-integer values (such as Currency Field Type and Percent Field Type) contain values of type double. Some restrictions may be applied to double values: • `scale`: Maximum number of digits to the right of the decimal place. • `precision`: Total number of digits, including those to the left and the right of the decimal place The maximum number of digits to the left of the decimal place is equal to `precision` minus `scale`. In the online application, precision is defined differently—it is the maximum number of digits allowed to the left of the decimal place. Values can be stored in scientific notation if the number is large enough (or, for negative numbers, small enough), as indicated by the W3C XML Schema Part 2: Datatypes Second Edition specification. Warning: When the user sets the precision in custom fields in the Salesforce application, it displays the precision set by the user, even if the user enters a more precise value than defined for those

Value	Details
	fields. However, when you set the precision in custom fields using the API, no rounding occurs when the user retrieves the number field.
int	Fields of this type contain numbers with no fractional portion (digits to the right of a decimal place), such as the `NumberOfEmployees` in an Account. For integer fields, the digits field specifies the maximum number of digits that an integer can have.
string	Character strings. Fields that are of data type `string` contain text and some have length restrictions depending on the data being stored. For example, in the Contact object, the `FirstName` field is 40 characters, the `LastName` field is 80 characters, the `MailingStreet` is 255 characters. Note: For fields that contain strings, behavior is different beginning with API version 15.0. In API versions previous to 15.0, if you specify a value for a field, and that value is too large, the value is truncated. For API version 15.0 and later, if a value is specified that is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. AllowFieldTruncationHeader allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later. This header has no effect in versions 14.0 and earlier. The affected fields are: anyType, email, encryptedstring, multipicklist, phone, picklist, string, and textarea.
time	Time values. Fields of this type handle time values, such as `FridayEndTime` in the BusinessHours object. Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation.

These data types are used in the SOAP messages that are exchanged between your client application and the API. When writing your client application, follow the data typing rules defined for your programming language and development environment. Your development tool handles the mapping of typed data in your programming language with these SOAP data types.

The primitive data types are:

- specified in the World Wide Web Consortium's publication *XML Schema Part 2: Data Types* at the following URL: `http://www.w3.org/TR/xmlschema-2/`.
- enumerated in the `SOAPType` field of the Field type, which is described in the `fields` property of the DescribeSObjectResult.

Primitive types are used as a standardized way to define, send, receive, and interpret basic data types in the SOAP messages exchanged between client applications and the API. In addition, primitive data types are interpreted in a Salesforce-specific way, which is useful for display formatting and for numeric conversion (adding values of different currencies).

For example, Salesforce chooses to interpret a double value passed via SOAP as a `double` in a number of possible ways, depending on the field definition. If the field type for that data is currency, Salesforce handles the display of the data by prepending it with a currency symbol and inserting a decimal for precision. Similarly, if the field type is percent, Salesforce handles the display of the data by appending a percent sign (%). Regardless of the field type, however, the value is sent in the SOAP message as a double.

The API uses data types called field types that are defined in the WSDLs. For more information, see Field Types.

Field Types

In addition to the primitive data types, the API defines the following data types for fields:

Note: For fields that contain strings, behavior is different beginning with API version 15.0. In API versions previous to 15.0, if you specify a value for a field, and that value is too large, the value is truncated. For API version 15.0 and later, if a value is specified that is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. AllowFieldTruncationHeader allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later. This header has no effect in versions 14.0 and earlier. The affected fields are: anyType, email, encryptedstring, multipicklist, phone, picklist, string, and textarea.

Field Type	What the Field Contains
address	A compound data type that contains address field data. See Address Compound Fields.
anyType	Polymorphic data type that returns string, picklist, reference, Boolean, currency, int, double, percent, ID, date, datetime, url, or email data depending on the kind of field involved. See AnyType Field Type.
calculated	Fields that are defined by a formula. See Calculated Field Type.
combobox	A combobox, which includes a set of enumerated values and allows the user to specify a value not in the list. See ComboBox Field Type.
currency	Currency values. See Currency Field Type.
DataCategoryGroupReference	Reference to a data category group or a category unique name. See DataCategoryGroupReference Field Type.
email	Email addresses. See Email Field Type.
encryptedstring	Encrypted text fields contain any combination of letters, numbers, or symbols that are stored in encrypted form. You can set a maximum length of up to 175 characters. Available in API versions 11.0 and later.
ID	Primary key field for the object. See ID Field Type. Note that most Web services tools, including .NET andWSC, map the ID simple type defined in the API WSDL (Enterprise or Partner) to a string. However, other tools generate a specific ID class to represent the ID simple type. Please consult your Web services toolkit documentation for more information.
JunctionIdList	A string array of referenced ID values that represent the many-to-many relationship of an underlying junction entity. Query and manipulate the string array to query and manipulate the underlying junction entities in a single API call. See: JunctionIdList Field Type Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
location	A compound data type that contains latitude and longitude values for geolocation fields. See Geolocation Compound Field.
masterrecord	When records are merged, the ID of the record that is saved (the other records are deleted).
multipicklist	Multi-select picklists, which include a set of enumerated values from which multiple values can be selected. See Multi-Select Picklist Field Type.
percent	Percentage values. See Percent Field Type.

Field Type	What the Field Contains
phone	Phone numbers. Values can include alphabetic characters. Client applications are responsible for phone number formatting. See Phone Field Type.
picklist	Picklists, which include a set of enumerated values from which one value can be selected. See Picklist Field Type.
reference	Cross-references to a different object. Analogous to a foreign key field in SQL. See Reference Field Type.
textarea	String that is displayed as a multiline text field. See Textarea Field Type.
url	URL values. Client applications should commonly display these as hyperlinks. See URL Field Type.

These field types extend primitive data types. While many of these field types follow common data typing conventions that are made explicit in their metadata, certain field types have unique characteristics that you need to understand before using them in your client application.

These field types apply to both standard and custom fields. They are enumerated in the `type` field of the Field type, which is described in the `fields` property of the DescribeSObjectResult.

Note: Some numeric fields have precision and scale limits. In addition, certain text fields have length restrictions. These restrictions are enforced when you `create()` or `update()` objects. However, the API may return data that does not meet these restrictions.

AnyType Field Type

The `anyType` field type is dynamic and returns `string`, `date`, `number`, or `boolean` data depending on the kind of field involved. For example, the element in a SOAP message has an `xsi:type="xsd:string"` attribute if the field is of type `string`. This field type is used in history objects for the `NewValue` and `OldValue` fields. It is also a valid field type for `fieldType` and `soapType`.

Note: Most SOAP toolkits automatically deserialize this element into the correct native type.

Calculated Field Type

Calculated fields are read-only fields in the API. These are fields defined by a formula, which is an algorithm that derives its value from other fields, expressions, or values. You can filter on these fields in SOQL, but you should not replicate these fields. The length of text calculated fields is 3900 characters or less—anything longer will be truncated.

Calculated fields are called formula fields in the Salesforce user interface.

ComboBox Field Type

A combobox is a picklist that also allows users to type a value that is not already specified in the list. A combobox is defined as a string value.

Currency Field Type

Currency fields contain currency values, such as the `ExpectedRevenue` field in a Campaign, and are defined as type double.

For organizations that have the multicurrency option enabled, the `CurrencyIsoCode` field is defined for any object that can have currency fields. The `CurrencyIsoCode` field and currency fields are linked in a special way. On any specific record, the `CurrencyIsoCode` field defines the currency of that record, and thus, the values of all currency fields on that record will be expressed in that currency.

For most cases, clients do not need to consider the linking of the `CurrencyIsoCode` field and the currency fields on an object. However, clients may need to consider the following:

- The `CurrencyIsoCode` field exists only for those organizations that have enabled multicurrency support.
- When displaying the currency values in a user interface, it is preferred to prepend each currency value with its `CurrencyIsoCode` value and a space separator.
- The `CurrencyIsoCode` field is a restricted picklist field. The set of allowable values, defined in the CurrencyType object, can vary from organization to organization. Attempting to set it to a value that is not defined for an organization causes the operation to be rejected.
- If you update the `CurrencyIsoCode` field on an object, it implicitly converts all currency values on that object to the new currency code, using the conversion rates that are defined for that organization in the Salesforce user interface. If you specify currency values in that same `update()` call, the new currency values you specify are interpreted in the new `CurrencyIsoCode` field value, without conversion.
- The picklist values in a `CurrencyIsoCode` field do not exactly match the labels displayed in Salesforce.

To perform currency conversions, client applications can look up the `CurrencyIsoCode` in the CurrencyType object.

DataCategoryGroupReference Field Type

A data category group has categories that classify articles in Salesforce Knowledge and questions in the Answers feature. Every article and question object has two fields of type DataCategoryGroupReference which contain the category group and category unique name. You can use the `describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()` calls to retrieve the category groups and categories associated to these objects.

Email Field Type

Email fields contain email addresses. Client applications are responsible for specifying valid and properly formatted email addresses in `create()` and `update()` calls.

ID Field Type

With rare exceptions, all objects in the API have a field of type ID that is named `Id` and contains a unique identifier for each record in the object. It is analogous to a primary key in relational databases. When you `create()` a new record, the Web service generates an ID value for the record, ensuring that it is unique within your organization's data. You cannot use the `update()` call on ID fields. Because the ID value stays constant over the lifetime of the record, you can refer to the record by its ID value in subsequent API calls. Also, the ID value contains a three-character code that identifies the object type, which client applications can retrieve via the `describeSObjects()` call.

In addition, certain objects, including custom objects, have one or more fields of type `reference` that contain the ID value for a related record. These fields have names that end in the suffix "-Id", for example, `OwnerId` in the account object. `OwnerId` contains the ID of the user who owns that object. Unlike the field named `Id`, `reference` fields are analogous to foreign keys and can be changed via the `update()` call. For more information, see Reference Field Type.

Some API calls, such as `retrieve()` and `delete()`, accept an array of IDs as parameters—each array element uniquely identifies the row to retrieve or delete. Similarly, the `update()` call accepts an array of sObject records—each sObject contains an `Id` field that uniquely identifies the sObject.

ID fields in the Salesforce user interface contain 15-character, base-62, case-sensitive strings. Each of the 15 characters can be a numeric digit (0-9), a lowercase letter (a-z), or an uppercase letter (A-Z). Two unique IDs may only be different by a change in case.

Because there are applications like Access which do not recognize that 50130000000014c is a different ID from 50130000000014C, an 18-digit, case-safe version of the ID is returned by all API calls. The 18 character IDs have been formed by adding a suffix to each ID in the Lightning Platform API. 18-character IDs can be safely compared for uniqueness by case-insensitive applications, and can be used in all API calls when creating, editing, or deleting data.

If you need to convert the 18-character ID to a 15-character version, truncate the last three characters. Salesforce recommends that you use the 18-character ID.

Note: Most Web services tools, including .NET and WSC, map the ID simple type defined in the API WSDL (Enterprise or Partner) to a string. However, other tools generate a specific ID class to represent the ID simple type. Please consult your web services toolkit documentation for more information.

JunctionIdList Field Type

Starting in API version 34.0, the `JunctionIdList` field type lets you manipulate the many-to-many relationship of an entity directly. You no longer need to manipulate underlying junction entity records. `JunctionIdList` fields can be queried and updated like any other field on the entity. Queries or updates to `JunctionIdList` fields act as queries or updates to the underlying junction entity records. Fields of type `JunctionIdList` appear in the WSDL as an unbounded array of type ID.

Query JunctionIdList fields just like any other field. Here's an example of a SOQL query that includes the `TaskWhoIds` JunctionIdList field.

```
SELECT Id, Subject, TaskWhoIds
FROM Task
WHERE LastModifiedDate > LAST_WEEK
```

Multi-Select Picklist Field Type

Multi-select picklist fields contain a list of one or more items from which a user can choose multiple items. One of the items can be configured as the default item. Selections are maintained as a string containing a series of attributes delimited by semicolons. For example, a query might return the values of a multivalue picklist as "first value; second value; third value". For information on querying multi-select picklists, see Querying Multi-Select Picklists in the *Salesforce SOQL and SOSL Reference Guide*.

Percent Field Type

Percent fields contain percent values. Percent fields are defined as type double.

Phone Field Type

Phone fields contain phone numbers, which can include alphabetic characters. Client applications are responsible for phone number formatting.

Picklist Field Type

Picklist fields contain a list of one or more items from which a user chooses a single item. They display as drop-down lists in the Salesforce user interface. One of the items can be configured as the default item.

In the Field object associated with the DescribeSObjectResult, the `restrictedPicklist` field defines whether the field is a restricted picklist or not. The API does not enforce the list of values for advisory (unrestricted) picklist fields on `create()` or `update()`. When inserting an unrestricted picklist field that does not have a PicklistEntry, the system creates an “inactive” picklist value. This value can be promoted to an “active” picklist value by adding the picklist value in the Salesforce user interface.

When creating new, inactive picklists, the API checks to see if there is a match. This check is case-insensitive.

In theField object associated with the DescribeSObjectResult, the `picklistValues` field contains an array of items (PicklistEntry objects). Each PicklistEntry defines the item’s label, value, and whether it is the default item in the picklist (a picklist has no more than one default value).

Enumerated fields support localization of the labels to the language of the user. For example, for the `Industry` field on an Account, the value “Agriculture” may be translated to various languages. The enumerated field values are fixed and do not change with a user’s language. However, each value may have a specified “label” field that provides the localized label for that value. You must always use the value when inserting or updating a field. The `query()` call always returns the value, not the label. The corresponding label for a value in the describeSObjectResult should be used when displaying the value to the user in any user interface.

The API supports the retrieval of the certain picklists in the following objects: CaseStatus, ContractStatus, LeadStatus, OpportunityStage, PartnerRole, SolutionStatus, TaskPriority, and TaskStatus. Each object represents a value in the respective picklist. These picklist entries always specify some other piece of information, such as whether the status is converted, and so on. Your client application can invoke the `query()` call on any of these objects (such as CaseStatus) to retrieve the set of values in the picklist, and then use that information while processing other objects (such as Case objects) to find more information about those objects (such as a given case). These objects are read-only via the API. To modify items in picklists, you must use the Salesforce user interface.

Reference Field Type

A reference field contains an `Id` value that points to a unique record (usually the parent record) on another object. This is analogous to the concept of a foreign key in relational databases. The name of a reference field ends, by convention, with the letters `Id` (such as `CaseId` or `OpportunityId`). For example, in the OpportunityCompetitor object, the `OpportunityId` field is a reference field that points to the Opportunity object. It contains an ID value that uniquely identifies an Opportunity record.

In some cases, an object can refer to another object of its same type. For example, an Account can have a parent link that points to another Account.

The Event and Task objects both have `WhoId` and `WhatId` cross-reference ID fields. Each of these cross-reference fields can point to one of several other objects. The `WhoId` field can point to a Contact or Lead, and the `WhatId` field can point to an Account, Opportunity, Campaign, or Case. In addition, if the `WhoId` field refers to a Lead, then the `WhatId` field must be empty.

You can describe and query each cross-referenced object. When you query a cross-reference ID field, it returns an object ID of the appropriate type. You can then query that ID to get additional information about the object, using the ID in the `id` field for that query.

The cross-reference ID field value is either:

- a valid record in your organization, or
- an empty value, which indicates an empty reference

The cross-reference ID field value, if non-`null`, is guaranteed to be an object in your organization. However, it is not guaranteed that you can query that object. Users with the “View All Data” permission can always query that object. Other users may be restricted from viewing or editing the referenced object.

When specifying a value for a cross-reference ID field in a `create()` or `update()` call, the value must be a valid value of type ID, and the user must have appropriate access to that object. The exact requirements vary from field to field.

Textarea Field Type

Textarea fields contain text that can be longer than 4000 bytes. Unlike string fields, textarea fields cannot be specified in the WHERE clause of a queryString of a `query()` call. To filter records on this field, you must do so while processing records in the QueryResult. For fields with this restriction, its `filterable` field in the Field type (described in the `fields` property of the DescribeSObjectResult) is `false`.

URL Field Type

URL fields contain URLs. Client applications are responsible for specifying valid and properly formatted URLs in `create()` and `update()` calls.

Compound Fields

Compound fields group together multiple elements of primitive data types, such as numbers or strings, to represent complex data types, such as a location or an address. Compound fields are an abstraction that can simplify application code that handles the values, leading to more concise, understandable code.

Address compound fields are available in the SOAP and REST APIs in API version 30.0 and later. Geolocation fields are available in the SOAP and REST APIs in API version 26.0 and later, with some limitations on SOAP for API versions below 30.0.

Compound fields are accessible as a single, structured field, or as individual component fields. The values contained within the compound field and the values in individual fields both map to the same underlying data stored in Salesforce; they always have identical values. Code that references individual component fields is unaffected by the new compound fields.

Compound fields are read-only. Changes are performed by writing to the individual component fields. This maintains a single, consistent method for performing updates, and avoids the possibility of conflicts. For example, if both the `BillingAddress` compound field and `BillingCity` individual component field were updated in the same API call, it would be unclear which value should be saved.

Compound fields are available only through the SOAP and REST APIs. Compound fields are described in both the Enterprise and Partner WSDLs. Update your WSDL to at least API 30.0 to access the new compound data types.

Address Compound Fields

Standard addresses—addresses built into standard objects in Salesforce—are accessible in the SOAP and REST APIs as an `Address`, a structured compound data type, as well as individual address elements.

The `Address` type extends the `Location` type, the data type used for compound geolocation fields. Using API 30.0 and later, standard addresses are available in the SOAP and REST APIs as a compound field of type `Address`, a structured data type that combines the following fields.

Field	Type	Description
`Accuracy`	picklist	Accuracy level of the geocode for the address. For example, this field is known as `MailingGeocodeAccuracy` on Contact.
`City`	string	The city detail for the address. For example, this field is known as `MailingCity` on Contact.
`Country`	string	The country detail for the address. For example, this field is known as `MailingCountry` on Contact.

Field	Type	Description
CountryCode	picklist	The ISO country code for the address. For example, this field is known as MailingCountryCode on Contact. CountryCode is always available on compound address fields, whether or not state and country picklists are enabled in your organization.
Latitude	double	Used with Longitude to specify the precise geolocation of the address. For example, this field is known as MailingLatitude on Contact.
Longitude	double	Used with Latitude to specify the precise geolocation of the address. For example, this field is known as MailingLongitude on Contact.
PostalCode	string	The postal code for the address. For example, this field is known as MailingPostalCode on Contact.
State	string	The state detail for the address. For example, this field is known as MailingState on Contact.
StateCode	picklist	The ISO state code for the address. For example, this field is known as MailingStateCode on Contact. StateCode is always available on compound address fields, whether or not state and country picklists are enabled in your organization.
Street	textarea	The street detail for the address. For example, this field is known as MailingStreet on Contact.

Address fields are provided on many standard objects, such as Account, Contact, Quote, and User. Some objects provide fields for multiple addresses. For example, Account provides for four different addresses. In this case, address field names are prefixed with the type of address, for example, BillingAddress, ShippingAddress, and so on.

Note: Standard address compound fields are read-only, and are only accessible using the SOAP and REST APIs. See Compound Field Considerations and Limitations on page 42 for additional details of the restrictions this imposes.

When an address is geocoded, its latitude and longitude fields are populated with coordinates. A related geolocation field is also populated. Typically, geocoding service providers geocode addresses, and rate the accuracy of the geocodes.

The accuracy subfield GeocodeAccuracy stores the accuracy data for a geocoded location. External geolocation apps can get the accuracy level of a geocoded address via the API. When you retrieve an address via the API, any accuracy data is included. You can also retrieve the accuracy information by itself, if needed.

Like its parent, the compound Address field, the GeocodeAccuracy field is only available for standard address fields on standard objects.

Retrieving Compound Address Fields

Using compound fields can simplify code that works with addresses, especially for SOQL queries. SOQL SELECT clauses can reference addresses directly, instead of all of the individual component fields.

```
SELECT Name, BillingAddress
FROM Account
```

To write code that's compatible with API versions before 30.0, as well as API 30.0 and above, use the individual fields:

```
SELECT Name, BillingStreet, BillingCity, BillingState, BillingPostalCode,
       BillingCountry, BillingLatitude, BillingLongitude
FROM Account
```

Compound address field values are returned as a structured data type, `Address`. Code that works with compound address fields needs to reference the individual components of the returned value. See the code sample below.

Example: Retrieve a Standard Address Compound Field with the SOAP API

The following Java method uses the Salesforce SOAP API to retrieve and display the Mailing Address for a list of contacts.

```
// Modified version of code in the SOAP API QuickStart
private void querySample() {
    String soqlQuery = "SELECT FirstName, LastName, MailingAddress FROM Contact";
    try {
        QueryResult qr = connection.query(soqlQuery);
        boolean done = false;

        if (qr.getSize() > 0) {
            System.out.println("\nLogged-in user can see "
              + qr.getRecords().length + " contact records.");

            while (!done) {
                System.out.println("");
                SObject[] records = qr.getRecords();
                for (int i = 0; i < records.length; ++i) {
                    Contact con = (Contact) records[i];
                    String fName = con.getFirstName();
                    String lName = con.getLastName();

                    // Access the compound address field MailingAddress
                    Address addr = (Address) con.getMailingAddress();
                    String streetAddr = "";
                    if (null != addr) streetAddr = addr.getStreet();

                    if (fName == null) {
                        System.out.println("Contact " + (i + 1) + ": " + lName +
                            " -- " + streetAddr);
                    } else {
                        System.out.println("Contact " + (i + 1) + ": " + fName +
                            " " + lName +
                            " -- " + streetAddr);
                    }
                }

                if (qr.isDone()) {
                    done = true;
                } else {
                    qr = connection.queryMore(qr.getQueryLocator());
                }
            }
        } else {
            System.out.println("No records found.");
        }
```

```
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Using Compound Address Fields as Locations

Compound address fields include latitude and longitude fields. Address fields can be used as locations in SOQL `WHERE` and `ORDER BY` clauses. For example, here's a SOQL query that uses the `GEOLOCATION` function to retrieve the 10 accounts closest to San Francisco.

```
SELECT Id, Name, BillingAddress
FROM Account
WHERE DISTANCE(BillingAddress, GEOLOCATION(37.775,-122.418), 'mi') < 20
ORDER BY DISTANCE(BillingAddress, GEOLOCATION(37.775,-122.418), 'mi')
LIMIT 10
```

Note: In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.

Geolocation Compound Field

Geolocation fields are accessible in the SOAP and REST APIs as a `Location`—a structured compound data type—or as individual latitude and longitude elements.

In API versions 26.0 and later, geolocation fields are available in the SOAP and REST APIs as a compound field of type `Location`. This structured data type contains the following fields.

- `latitude`
- `longitude`

Note: SOAP calls that use API versions earlier than 30.0 return geolocation compound values as strings. See "Returned Geolocation Data Types" later in this topic.

Geolocation fields are provided on many standard objects, such as Account, Contact, Quote, and User, as part of their address field or fields. Geolocation fields can also be added as custom fields to standard or custom objects.

Note:

- A geolocation compound field is read-only, although its `latitude` and `longitude` subfields are editable. You can only access compound fields using the SOAP or REST API. For more information about working with compound fields and their subfields, see Compound Field Considerations and Limitations on page 42.
- Although geolocation fields appear as a single field in the user interface, custom geolocation fields count as *three* custom fields towards your organization's limits: one for latitude, one for longitude, and one for internal use.

Retrieving Compound Geolocation Fields

Using compound fields can simplify code that works with geolocations, especially for SOQL queries. SOQL `SELECT` clauses can reference geolocations directly, instead of the individual component fields.

```
SELECT location__c
FROM Warehouse__c
```

To write code that's compatible with API versions earlier than 26.0 and with API versions 26.0 and later, use the individual latitude and longitude fields.

```
SELECT location__latitude__s, location__longitude__s
FROM Warehouse__c
```

Returned Geolocation Data Types

A compound geolocation field value is returned as the structured data type `Location`. Code that works with compound geolocation fields must reference the individual components of the returned value. See the sample code in Address Compound Fields on page 40.

In API versions earlier than 30.0, SOAP calls return compound geolocation field values as strings, instead of as a structured data type, for backward compatibility. If you plan to display your latitude and longitude values or pass them to a service that expects strings, use the values that are returned. If you plan to use the values in mathematical calculations or pass them to a map service that expects numbers, cast the results to numbers.

The string value format is:

```
API location: [latitudeValue longitudeValue]
```

An example of a regular expression to parse out the latitude and longitude values is:

```
API location: \[([-+]?\d{1,2}([.]\d+)?) ([-+]?\d{1,3}([.]\d+)?)]
```

The first capture is the latitude, and the third is the longitude.

Compound Field Considerations and Limitations

Address and geolocation compound fields are convenient and result in more concise, clear code. Here are some things to consider when using them in your apps.

Both address and geolocation compound fields have the following limitations.

- Compound fields are read-only. To update field values, modify the individual field components.
- Compound fields are accessible only through the SOAP and REST APIs. The compound versions of fields aren't accessible anywhere in the Salesforce user interface.
- Although compound fields can be queried with the `Location` and `Address` Apex classes, they're editable only as components of the actual field. Read and set geolocation field components by appending "__latitude__s" or "__longitude__s" to the field name, instead of the usual "__c." For example:

  ```
  Double theLatitude = myObject__c.aLocation__latitude__s;
  myObject__c.aLocation__longitude__s = theLongitude;
  ```

  You can't access or set the compound value.
- You can't use compound fields in Visualforce—for example, in an `<apex:outputField>`. To access or update field values, use the individual field components.

- If you select compound fields for export in the Data Loader, they cause error messages. To export values, use individual field components.
- Custom geolocation and location fields on standard addresses aren't supported with email templates.
- You can't use compound fields in lookup filters, except to filter distances that are within or not within given ranges. You can use distance lookup filters only in the Metadata API.
- The only formula functions that you can use with compound fields are `ISBLANK`, `ISCHANGED`, and `ISNULL`. You can't use `BLANKVALUE`, `CASE`, `NULLVALUE`, `PRIORVALUE`, or the equality and comparison operators with compound fields. The equality and comparison operators include = and == (equal), <> and != (not equal), < (less than), > (greater than), <= (less than or equal), >= (greater than or equal), `&&` (AND), and `||` (OR).

Address compound fields have the following limitations.

- Compound address fields are available only for address fields that exist as part of the standard objects included in Salesforce. You can't create custom compound address fields.
- In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.
- The accuracy subfield of address fields is populated only when an address is geocoded. Typically, geocoding service providers provide accuracy data for an address's latitude and longitude coordinates.
- Address fields can't be used in `WHERE` statements in SOQL. Address fields aren't filterable, but the `isFilterable()` method of the `DescribeFieldResult` Apex class erroneously returns `true` for address fields.

Geolocation compound fields have the following limitations.

- Geolocation fields aren't supported in custom settings.
- Geolocation fields aren't available in dashboards or Schema Builder.
- Geolocation fields are available in Visual Workflow and in formula-based workflow and approvals, but they can't be used in filter-based workflow updates and approvals.
- `DISTANCE` formulas are supported in:
  - Entry criteria for workflow rules and approval processes
  - Field update actions in workflow rules and approval processes
  - Custom validation rules
  - Lookup filters (in the Metadata API only)
- Geolocation fields and latitude and longitude on standard addresses aren't supported in Salesforce to Salesforce.
- In Developer, Professional, Enterprise, Unlimited, and Performance editions, Salesforce can automatically add or update geolocation fields for Account, Contact, Lead, and WorkOrder records. To use this feature, your administrator must enable the geo data integration rule for each object. For all other objects and editions, set values for latitude and longitude by using SOQL, Workbench, SOAP or REST API, or a geocoding service. You can then use address fields as locatable values. To find geocoding services, search AppExchange.
- Geolocation fields are supported in SOQL with the following limitations.
  - `DISTANCE` and `GEOLOCATION` are supported in `WHERE` and `ORDER BY` clauses in SOQL, but not in `GROUP BY`. `DISTANCE` is supported in `SELECT` clauses.
  - `DISTANCE` supports only the logical operators > and <, returning values within (<) or beyond (>) a specified radius.
  - When using the `GEOLOCATION` function in SOQL queries, the geolocation field must precede the latitude and longitude coordinates. For example, `DISTANCE(warehouse_location__c, GEOLOCATION(37.775,-122.418), 'km')` works but `DISTANCE(GEOLOCATION(37.775,-122.418), warehouse_location__c, 'km')` doesn't work.

- Apex bind variables aren't supported for the units parameter in `DISTANCE` or `GEOLOCATION` functions. This query doesn't work.

```
String units = 'mi';
List<Account> accountList =
    [SELECT ID, Name, BillingLatitude, BillingLongitude
     FROM Account
     WHERE DISTANCE(My_Location_Field__c, GEOLOCATION(10,10), :units) < 10];
```

For more information and examples, see the *SOQL and SOSL Reference*.

API Data Types and Salesforce Field Types

Generally, API data types and field types in the user interface have the same names. For example, a date field is represented by a date data type in the API. However, some field types are represented differently depending on whether you are inspecting an object via the API or the user interface. The following table contains the mapping for field types and data types that are different:

API Data Type	Corresponding Field Types in the User Interface
ID	Lookup relationship, master-detail relationship
string	Auto number, email, phone, picklist, multi-select picklist, text, text area, long text area, rich text area, data category group reference and URL. Different maximum lengths are specified in the WSDL for text, text area, and long text area.
boolean	Checkbox
double	Currency, formula, number, percent, and roll-up summary
Varies by type	When formula fields are created in the user interface, a type must be specified. This type corresponds to the API data type of the same name: currency, date, date/time, number, percent, or text.

All other fields that you can create in the user interface fall into one of the following categories:

- The field is not available in both the user interface and the API. For example, the BusinessHours object has fields of API data type time, but you cannot create a custom field of this type.
- Field types are the same as their corresponding API data type. For example, if you create a date field in the user interface, that field is the date data type in the API.

For more information about API data types, see Primitive Data Types and Field Types.

Core Data Types Used in API Calls

Many calls in the API use the following data types:

- sObject
- ID (String). See ID Field Type.

The API also uses several error handling objects. If an error occurs during a SOAP request, the API returns a SOAP fault message. The message contains different content, depending on the type of error:

- If an error affects the entire request, an API Fault Element, is returned, containing an ExceptionCode and the associated error message text.
- If the error affects some records and not others, an Error is returned, containing a StatusCode. These errors typically occur during bulk operations, such as creating, updating, or deleting multiple records with a single call.

sObject

An sObject represents an object, such as an Account or Campaign. For a list of standard objects, see Standard Objects.

An sObject has the following properties:

Name	Type	Description
`fieldsToNull`	string[]	Array of one or more field names whose value you want to explicitly set to `null`. When used with `update()` or `upsert()`, you can specify only those fields that you can update and that have the `nillable` property. When used with `create()`, you can specify only those fields that you can create and that have the `nillable` or the `default on create` property. For example, if specifying an ID field or required field results in a runtime error, you can specify that field name in `fieldsToNull`. Similarly, if a picklist field has a default value and you want to set the value to `null` instead, specify the field in `fieldsToNull`.
`ID`	ID	Unique ID for this individual object. For the `create()` call, this value is null. For all other API calls, this value must be specified.

API Fault Element

An `ApiFault` element contains information about a fault that occurs when processing a service request. The `ApiFault` element has the following properties.

Name	Type	Description
`exceptionCode`	ExceptionCode	A code that characterizes the exception. The full list of exception codes is available in the WSDL file for your org. See Generating the WSDL File for Your Organization.
`exceptionMessage`	string	Exception message text.
`extendedErrorDetails`	ExtendedErrorDetails	More details about the exception, including an extended error code and extra error properties, when available. Reserved for future use.

The following table lists the API fault elements that represent all the API faults that can occur.

Fault	Description
`ApiQueryFault`	The row and column numbers where the problem occurred.
`LoginFault`	An error occurred during the `login()` call.
`InvalidSObjectFault`	An invalid sObject in a `describeSObject()`, `describeSObjects()`, `describeLayout()`, `describeDataCategoryGroups()`,

Fault	Description
	describeDataCategoryGroupStructures(), create(), update(), retrieve(), or query() call.
InvalidFieldFault	An invalid field in a retrieve() or query() call.
InvalidOrNullForRestrictedPicklist	An invalid appMenuType in a describeAppMenu() call.
MalformedQueryFault	A problem in the queryString passed in a query() call.
InvalidQueryLocatorFault	A problem in the queryLocator passed in a queryMore() call.
MalformedSearchFault	A problem in the search passed in a search() call.
InvalidIdFault	A specified ID was invalid in a setPassword() or resetPassword() call.
UnexpectedErrorFault	An unexpected error occurred. The error is not associated with any other API fault.

ExceptionCode

The following list of ExceptionCode values is defined in your WSDL file. Some codes don't appear in your WSDL, depending on the features you have enabled.

API_CURRENTLY_DISABLED
Because of a system problem, API functionality is temporarily unavailable.

API_DISABLED_FOR_ORG
API access has not been enabled for the org. Contact Salesforce to enable API access.

CANT_ADD_STANDARD_PORTAL_USER_TO_TERRITORY
A user with a standard portal license can't be added to a territory.

CIRCULAR_OBJECT_GRAPH
The request failed because it contained a circular object reference.

CLIENT_NOT_ACCESSIBLE_FOR_USER
The current user does not have permission to access the specified client.

CLIENT_REQUIRE_UPDATE_FOR_USER
The current user is required to use a newer version of the specified client and doesn't have access until the client is updated.

DELETE_REQUIRED_ON_CASCADE
The delete operation triggers a cascade delete on a record, but the logged-in user does not have delete permission on that related object.

DUPLICATE_COMM_NICKNAME
You can't create a user with the same nickname as another user.

DUPLICATE_VALUE
You can't supply a duplicate value for a field that must be unique. For example, you can't submit two copies of the same session ID in a invalidateSessions() call.

EMAIL_BATCH_SIZE_LIMIT_EXCEEDED
A method tried to process more email records than the maximum batch size.

EMAIL_TO_CASE_INVALID_ROUTING
An email to case record has been submitted for processing but the feature is not enabled.

EMAIL_TO_CASE_LIMIT_EXCEEDED
The daily converted email limit for the Email-to-Case feature has been exceeded.

EMAIL_TO_CASE_NOT_ENABLED
The Email-to-Case feature has not been enabled.

EXCEEDED_ID_LIMIT
Too many IDs were specified in a call. For example, more than 2000 IDs were requested in a `retrieve()` call, or more than 200 session IDs were specified in a `logout()` call.

EXCEEDED_LEAD_CONVERT_LIMIT
Too many IDs were sent to a `convertLead()` call.

EXCEEDED_MAX_SIZE_REQUEST
The size of the message sent to the API exceeded 50 MB.

EXCEEDED_MAX_TYPES_LIMIT
The number of object types to describe is too large.

EXCEEDED_QUOTA
The size limit for org data storage was exceeded during a `create()` call.

FUNCTIONALITY_NOT_ENABLED
Functionality has been temporarily disabled. Other calls continue to work.

INACTIVE_OWNER_OR_USER
The user or record owner is not active.

INACTIVE_PORTAL
The referenced portal is inactive.

INSUFFICIENT_ACCESS
The user does not have sufficient access to perform the operation.

INVALID_ASSIGNMENT_RULE
An invalid AssignmentRuleHeader value was specified.

INVALID_BATCH_SIZE
The query options have an invalid batch size value.

INVALID_CLIENT
The client is invalid.

INVALID_CROSS_REFERENCE_KEY
An invalid foreign key can't be set on a field. For example, an object share, such as AccountShare, can't be deleted because the share row is a result of a sharing rule.

INVALID_FIELD
The specified field name is invalid.

INVALID_FILTER_LANGUAGE
The specified language can't be used as a filter.

INVALID_FILTER_VALUE
A SOQL query with `LIKE` specified an invalid character, for example, an incorrectly placed asterisk (*). Correct the query and resubmit.

INVALID_ID_FIELD
The specified ID is correctly formatted but isn't valid. For example, the ID is of the wrong type, or the object it identifies no longer exists.

INVALID_GOOGLE_DOCS_URL
An invalid Salesforce record URL was used when trying to associate a Google Doc to that record. Correct the URL before trying the operation again.

INVALID_LOCATOR
The locator is invalid.

INVALID_LOGIN
The `login()` credentials are not valid, or the maximum number of logins have been exceeded. Contact your administrator for more information.

INVALID_NEW_PASSWORD
The new password does not conform with the password policies of the org.

INVALID_OPERATION
The client application tried to modify a record that is locked by an approval process.

INVALID_OPERATION_WITH_EXPIRED_PASSWORD
Due to password expiration, a valid password must be set using `setPassword()` before the call can be invoked.

INVALID_QUERY_FILTER_OPERATOR
An invalid operator was used in the `query()` filter clause, at least for that field.

INVALID_QUERY_LOCATOR
An invalid `queryLocator` parameter was specified in a `queryMore()` call. It's also possible that you've exceed the maximum number of calls, which is 10 per user for the API, and 5 for Apex and Visualforce.

INVALID_QUERY_SCOPE
The specified search scope is invalid.

INVALID_REPLICATION_DATE
The date for replication is out of the allowed range, such as before the org was created.

INVALID_SETUP_OWNER
The setup owner must be an Organization, Profile, or User.

INVALID_SEARCH
The `search()` call has invalid syntax or grammar. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

INVALID_SEARCH_SCOPE
The specified search scope is invalid.

INVALID_SESSION_ID
The specified `sessionId` is malformed (incorrect length or format) or has expired. Log in again to start a new session.

INVALID_SOAP_HEADER
There is an error in the SOAP header. If you are migrating from an earlier version of the API, be advised that the SaveOptions header can't be used with API version 6.0 or later. Use AssignmentRuleHeader instead.

INVALID_SSO_GATEWAY_URL
The URL provided to configure the Single Sign-On gateway was not a valid URL.

INVALID_TYPE
The specified sObject type is invalid.

INVALID_TYPE_FOR_OPERATION
The specified sObject type is invalid for the specified operation.

LIMIT_EXCEEDED
An array is too long. For example, there are too many BCC addresses, targets, or email messages.

LOGIN_DURING_RESTRICTED_DOMAIN
The user is not allowed to log in from this IP address.

LOGIN_DURING_RESTRICTED_TIME
The user is not allowed to log in during this time period.

MALFORMED_ID
An invalid ID string was specified. For information about IDs, see ID Field Type.

MALFORMED_QUERY
An invalid query string was specified. For example, the query string was longer than 20,000 characters.

MALFORMED_SEARCH
An invalid search string was specified. For example, the search string was longer than 20,000 characters.

MISSING_ARGUMENT
A required argument is missing.

MIXED_DML_OPERATION
There are limits on what kinds of DML operations can be performed in the same transaction. For more information, see the *Lightning Platform Apex Code Developer's Guide*.

NOT_MODIFIED
The describe call response has not changed since the specified date.

NO_SOFTPHONE_LAYOUT
If an org has the CTI feature enabled, but no softphone layout has been defined, this exception is returned if a describe call is issued. This exception is most often caused because no call center has been defined. A default softphone layout is created during call center definition.

If an org doesn't have the CTI feature enabled, `FUNCTIONALITY_NOT_ENABLED` is returned instead.

NUMBER_OUTSIDE_VALID_RANGE
The number specified is outside the valid range for the field.

OPERATION_TOO_LARGE
The query has returned too many results. If certain queries are run by a user without the "View All Data" permission and many records are returned, the queries require sharing rule checking. For example, consider queries that are run on objects, such as Task, that use a polymorphic foreign key. These queries return this exception because the operation requires too many resources. To correct, add filters to the query to narrow the scope, or use filters such as date ranges to break the query up into a series of smaller queries.

ORG_LOCKED
The org has been locked. Contact Salesforce to unlock the org.

ORG_NOT_OWNED_BY_INSTANCE
The user tried to log in to the wrong server instance. Choose another server instance or log in at `https://login.salesforce.com`. You can use `http` instead of `https`.

PASSWORD_LOCKOUT
The user has exceeded the allowed number of login attempts. The user must contact an administrator to regain login access.

PORTAL_NO_ACCESS
Access to the specified portal is not available.

QUERY_TIMEOUT
The query has timed out. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

QUERY_TOO_COMPLICATED
SOQL query is either selecting too many fields or there are too many filter conditions. Try reducing the number of formula fields referenced in the query.

REQUEST_LIMIT_EXCEEDED
Exceeded either the concurrent request limit or the request rate limit for your org. For details on API request limits, see API Usage Metering.

REQUEST_RUNNING_TOO_LONG
A request has taken too long to be processed.

SERVER_UNAVAILABLE
A server that is necessary for this call is unavailable. Other types of requests could still work.

SSO_SERVICE_DOWN
The service was unavailable, and an authentication call to the org's specified Single Sign-On server failed.

TOO_MANY_APEX_REQUESTS
Too many Apex requests have been issued. If this exception persists, contact Salesforce Customer Support.

TRIAL_EXPIRED
The trial period for the org has expired. A representative from the company must contact Salesforce to re-enable the org.

UNSUPPORTED_API_VERSION
A method call was made that doesn't exist in the accessed API version, for example, trying to use `upsert()` (new in 8.0) against version 5.0.

UNSUPPORTED_CLIENT
This version of the client is no longer supported.

Error

An `Error` contains information about an error that occurred during a `create()`, `merge()`, `process()`, `update()`, `upsert()`, `delete()`, or `undelete()` call. For more information, see Error Handling. An `Error` has the following properties:

Name	Type	Description
`statusCode`	StatusCode	A code that characterizes the error. The full list of status codes is available in the WSDL file for your org (see Generating the WSDL File for Your Organization).
`message`	string	Error message text.
`fields`	string[]	Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.
`extendedErrorDetails`	ExtendedErrorDetails	More details about the error, including an extended error code and extra error properties, when available. Reserved for future use.

Note: If your org has active duplicate rules and a duplicate is detected, the SaveResult includes an error with a data type of DuplicateError.

StatusCode

The following table lists API status codes that are returned with an error. Some codes don't appear in your WSDL, depending on the features you have enabled.

ALL_OR_NONE_OPERATION_ROLLED_BACK
The bulk operation was rolled back because one of the records wasn't processed successfully. See AllOrNoneHeader.

ALREADY_IN_PROCESS
You can't submit a record that is already in an approval process. Wait for the previous approval process to complete before resubmitting a request with this record.

ASSIGNEE_TYPE_REQUIRED
Designate an assignee for the approval request (ProcessInstanceStep or ProcessInstanceWorkitem).

BAD_CUSTOM_ENTITY_PARENT_DOMAIN
The changes you are trying to make can't be completed because changes to the associated master-detail relationship can't be made.

BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED
Your client application blind carbon-copied an email address even though the org's Compliance BCC Email option is enabled. This option specifies a particular email address that automatically receives a copy of all outgoing email. When this option is enabled, you can't BCC any other email address. To disable the option, log in to the user interface and from Setup, enter *Compliance BCC Email* in the `Quick Find` box, then select **Compliance BCC Email**.

BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED
Your client application blind carbon-copied the logged-in user's email address even though the org's BCC COMPLIANCE option is set to true. This option specifies a particular email address that automatically receives a copy of all outgoing email. When this option is enabled, you can't BCC any other email address. To disable the option, log in to the user interface and from Setup, enter *Compliance BCC Email* in the `Quick Find` box, then select **Compliance BCC Email**.

CANNOT_CASCADE_PRODUCT_ACTIVE
An update to a product caused by a cascade can't be done because the associated product is active.

CANNOT_CHANGE_FIELD_TYPE_OF_APEX_REFERENCED_FIELD
You can't change the type of a field that is referenced in an Apex script.

CANNOT_CREATE_ANOTHER_MANAGED_PACKAGE
You can create only one managed package in an org.

CANNOT_DEACTIVATE_DIVISION
You can't deactivate Divisions if an assignment rule references divisions or if the `DefaultDivision` field on a user record isn't set to null.

CANNOT_DELETE_LAST_DATED_CONVERSION_RATE
If dated conversions are enabled, you must have at least one DatedConversionRate record.

CANNOT_DELETE_MANAGED_OBJECT
You can't modify components that are included in a managed package.

CANNOT_DISABLE_LAST_ADMIN
You must have at least one active administrator user.

CANNOT_ENABLE_IP_RESTRICT_REQUESTS
If you exceed the limit of five IP ranges specified in a profile, you can't enable restriction of login by IP addresses. Reduce the number of specified ranges in the profile and try the request again.

CANNOT_INSERT_UPDATE_ACTIVATE_ENTITY
You do not have permission to create, update, or activate the specified record.

CANNOT_MODIFY_MANAGED_OBJECT
You can't modify components that are included in a managed package.

CANNOT_RENAME_APEX_REFERENCED_FIELD
You can't rename a field that is referenced in an Apex script.

CANNOT_RENAME_APEX_REFERENCED_OBJECT
You can't rename an object that is referenced in an Apex script.

CANNOT_REPARENT_RECORD
You can't define a new parent record for the specified record.

CANNOT_RESOLVE_NAME
A `sendEmail()` call could not resolve an object name.

CANNOT_UPDATE_CONVERTED_LEAD
A converted lead could not be updated.

CANT_DISABLE_CORP_CURRENCY
You can't disable the corporate currency for an org. To disable a currency that is set as the corporate currency, first use the user interface to change the corporate currency to a different currency. Then disable the original currency.

CANT_UNSET_CORP_CURRENCY
You can't change the corporate currency for an org from the API. Use the user interface to change the corporate currency.

CHILD_SHARE_FAILS_PARENT
If you don't have appropriate permissions on a parent record, you can't change the owner of or define sharing rules for a child record. For example, you can't change the owner of a contact record if you can't edit its parent account record.

CIRCULAR_DEPENDENCY
You can't create a circular dependency between metadata objects in your org. For example, public group A can't include public group B, if public group B already includes public group A.

COMMUNITY_NOT_ACCESSIBLE
You do not have permission to access the community that this entity belongs to. You must be given permission to access the community before you can access this entity.

CUSTOM_CLOB_FIELD_LIMIT_EXCEEDED
You can't exceed the maximum size for a CLOB field.

CUSTOM_ENTITY_OR_FIELD_LIMIT
You have reached the maximum number of custom objects or custom fields for your org.

CUSTOM_FIELD_INDEX_LIMIT_EXCEEDED
You have reached the maximum number of indexes on a field for your org.

CUSTOM_INDEX_EXISTS
You can create only one custom index per field.

CUSTOM_LINK_LIMIT_EXCEEDED
You have reached the maximum number of custom links for your org.

CUSTOM_METADATA_LIMIT_EXCEEDED
Your org has reached its custom metadata maximum limit.

CUSTOM_SETTINGS_LIMIT_EXCEEDED
Your org has reached its custom settings maximum limit.

CUSTOM_TAB_LIMIT_EXCEEDED
You have reached the maximum number of custom tabs for your org.

DELETE_FAILED
You can't delete a record because it is in use by another object.

DEPENDENCY_EXISTS
You can't perform the requested operation because of an existing dependency on the specified object or field.

DUPLICATE_CASE_SOLUTION
You can't create a relationship between the specified case and solution because it already exists.

DUPLICATE_CUSTOM_ENTITY_DEFINITION
Custom object or custom field IDs must be unique.

DUPLICATE_CUSTOM_TAB_MOTIF
You can't create a custom object or custom field with a duplicate master name.

DUPLICATE_DEVELOPER_NAME
You can't create a custom object or custom field with a duplicate developer name.

DUPLICATES_DETECTED
Duplicate records have been detected. Used for an Error object with a data type of DuplicateError.

DUPLICATE_EXTERNAL_ID
A user-specified external ID matches more than one record during an upsert.

DUPLICATE_MASTER_LABEL
You can't create a custom object or custom field with a duplicate master name.

DUPLICATE_SENDER_DISPLAY_NAME
A `sendEmail()` call could not choose between OrgWideEmailAddress.`DisplayName` or `senderDisplayName`. Define only one of the two fields.

DUPLICATE_USERNAME
A create, update, or upsert failed because of a duplicate user name.

DUPLICATE_VALUE
You can't supply a duplicate value for a field that must be unique. For example, you can't submit two copies of the same session ID in a `invalidateSessions()` call.

EMAIL_ADDRESS_BOUNCED
Emails to one or more recipients have bounced. Check the email addresses to make sure that they are valid.

EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR
Because of an error earlier in the call, the current email was not processed.

EMAIL_OPTED_OUT
A single email message was sent with the `REJECT` setting in the `optOutPolicy` field to recipients that have opted out from receiving email. To avoid this error, set the `optOutPolicy` field to another value.

EMAIL_TEMPLATE_FORMULA_ERROR
The email template is invalid and can't be rendered. Check the template for incorrectly specified merge fields.

EMAIL_TEMPLATE_MERGEFIELD_ACCESS_ERROR
You don't have access to one or more merge fields in this template. To request access, contact your Salesforce administrator.

EMAIL_TEMPLATE_MERGEFIELD_ERROR
One or more merge fields don't exist. Check the spelling of field names.

EMAIL_TEMPLATE_MERGEFIELD_VALUE_ERROR
One or more merge fields have no value. To provide values, update the records before sending the email.

EMAIL_TEMPLATE_PROCESSING_ERROR
The merge fields in this email template can't be processed. Ensure that your template body is valid.

EMPTY_SCONTROL_FILE_NAME
The Scontrol file name was empty, but the binary was not empty.

ENTITY_FAILED_IFLASTMODIFIED_ON_UPDATE
If the value in a record's `LastModifiedDate` field is later than the current date, you can't update the record .

ENTITY_IS_ARCHIVED
If a record has been archived, you can't access it.

ENTITY_IS_DELETED
You can't reference an object that has been deleted. This status code occurs only in API version 10.0 and later. Previous releases of the API use `INVALID_ID_FIELD` for this error.

ENTITY_IS_LOCKED
You can't edit a record that is locked by an approval process.

ENVIRONMENT_HUB_MEMBERSHIP_CONFLICT
You can't add an org to more than one Environment Hub.

ERROR_IN_MAILER
An email address is invalid, or another error occurred during an email-related transaction.

FAILED_ACTIVATION
The activation of a Contract failed.

FIELD_CUSTOM_VALIDATION_EXCEPTION
You can't define a custom validation formula that violates a field integrity rule.

FIELD_FILTER_VALIDATION_EXCEPTION
You can't violate field integrity rules.

FILTERED_LOOKUP_LIMIT_EXCEEDED
The creation of the lookup filter failed because it exceeds the maximum number of lookup filters allowed per object.

HTML_FILE_UPLOAD_NOT_ALLOWED
Your attempt to upload an HTML file failed. HTML attachments and documents, including HTML attachments to a Solution, can't be uploaded if the `Disallow HTML documents and attachments` checkbox is selected on the HTML Documents and Attachments Settings page.

IMAGE_TOO_LARGE
The image exceeds the maximum width, height, and file size.

INACTIVE_OWNER_OR_USER
The owner of the specified item is an inactive user. To reference this item, either reactivate the owner or reassign ownership to another active user.

INSERT_UPDATE_DELETE_NOT_ALLOWED_DURING_MAINTENANCE
Starting with version 32.0, you can't create, update, or delete data while the instance where your org resides is being upgraded to the latest release. Try again after the release has completed. For release schedules, see `trust.salesforce.com`. Before version 32.0, the code is `INVALID_READ_ONLY_USER_DML`.

INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY
An operation affects an object that is cross-referenced by the specified object, but the logged-in user doesn't have sufficient permissions on the cross-referenced object. For example, a logged-in user attempts to modify an account record, and the update creates a ProcessInstanceWorkitem. If the user doesn't have permission to approve, reject, or reassign the ProcessInstanceWorkitem, this exception occurs.

INSUFFICIENT_ACCESS_OR_READONLY
You can't perform the specified action because you don't have sufficient permissions.

INVALID_ACCESS_LEVEL
You can't define a new sharing rule that provides less access than the specified org-wide default.

INVALID_ARGUMENT_TYPE
You supplied an argument that is of the wrong type for the operation being attempted.

INVALID_ASSIGNEE_TYPE
You specified an assignee type that is not a valid integer between one and six.

INVALID_ASSIGNMENT_RULE
You specified an assignment rule that is invalid or that isn't defined in the org.

INVALID_BATCH_OPERATION
The specified batch operation is invalid.

INVALID_CONTENT_TYPE
The outgoing email has anEmailFileAttachment with an invalid`contentType` property. See RFC2045 - Internet Message Format.

INVALID_CREDIT_CARD_INFO
The specified credit card information is not valid.

INVALID_CROSS_REFERENCE_KEY
The specified value in a relationship field is not valid, or data is not of the expected type.

INVALID_CROSS_REFERENCE_TYPE_FOR_FIELD
The specified cross-reference type is not valid for the specified field.

INVALID_CURRENCY_CONV_RATE
Specify a positive, non-zero value for the currency conversion rate.

INVALID_CURRENCY_CORP_RATE
You can't modify the corporate currency conversion rate.

INVALID_CURRENCY_ISO
The specified currency ISO code is not valid.

INVALID_EMAIL_ADDRESS
A specified email address is invalid.

INVALID_EMPTY_KEY_OWNER
You can't set the value for `owner` to null.

INVALID_EVENT_SUBSCRIPTION
Invalid parameters were specified when subscribing to an event.

INVALID_FIELD
You specified an invalid field name when trying to update or upsert a record.

INVALID_FIELD_FOR_INSERT_UPDATE
You can't combine a person account record type change with any other field update.

INVALID_FIELD_WHEN_USING_TEMPLATE
You can't use an email template with an invalid field name.

INVALID_FILTER_ACTION
The specified filter action can't be used with the specified object. For example, an alert is not a valid filter action for a Task.

INVALID_ID_FIELD
The specified ID field (`ID`, `ownerId`), or cross-reference field is invalid.

INVALID_INET_ADDRESS
A specified Inet address is not valid.

INVALID_LINEITEM_CLONE_STATE
You can't clone a Pricebook2 or PricebookEntry record that isn't active.

INVALID_MASTER_OR_TRANSLATED_SOLUTION
The solution is invalid. For example, this exception occurs if you try to associate a translated solution with a master solution that's associated with another translated solution.

INVALID_MESSAGE_ID_REFERENCE
The outgoing email's References or In-Reply-To fields are invalid. These fields must contain valid Message-IDs. See RFC2822 - Internet Message Format.

INVALID_OPERATION
There is no applicable approval process for the specified object.

INVALID_OPERATOR
The specified operator is not applicable for the field type when used as a workflow filter.

INVALID_OR_NULL_FOR_RESTRICTED_PICKLIST
You specified an invalid or null value for a restricted picklist.

INVALID_PARTNER_NETWORK_STATUS
The specified partner network status is invalid for the specified template field.

INVALID_PERSON_ACCOUNT_OPERATION
You can't delete a person account.

INVALID_READ_ONLY_USER_DML
Version 31.0 and earlier: You can't create, update, or delete data while the instance where your org resides is being upgraded to the latest release. Try again after the release has completed. For release schedules, see `trust.salesforce.com`. After version 31.0, the code is `INSERT_UPDATE_DELETE_NOT_ALLOWED_DURING_MAINTENANCE`.

INVALID_SAVE_AS_ACTIVITY_FLAG
Specify `true` or `false` for the `saveAsActivity` flag.

INVALID_SESSION_ID
The specified `sessionId` is malformed (incorrect length or format) or has expired. Log in again to start a new session.

INVALID_STATUS
The specified org status change is not valid.

INVALID_TYPE
The specified type is not valid for the specified object.

INVALID_TYPE_FOR_OPERATION
The specified type is not valid for the specified operation.

INVALID_TYPE_ON_FIELD_IN_RECORD
The specified value is not valid for the specified field's type.

IP_RANGE_LIMIT_EXCEEDED
The specified IP address is outside the IP range specified for the org.

JIGSAW_IMPORT_LIMIT_EXCEEDED
The number of records you attempted to purchase from Data.com exceeds your available record addition limit.

LICENSE_LIMIT_EXCEEDED
You have exceeded the number of licenses assigned to your org.

LIGHT_PORTAL_USER_EXCEPTION
You attempted an action with a high-volume portal user that's not allowed. For example, trying to add the user to a case team.

LIMIT_EXCEEDED
You have exceeded a limit on a field size or value, license, or other component.

LOGIN_CHALLENGE_ISSUED
An email containing a security token was sent to the user's email address because the user logged in from an untrusted IP address. The user can't log in until tthe security token is added to the end of the password.

LOGIN_CHALLENGE_PENDING
The user logged in from an untrusted IP address, but a security token has not yet been issued.

LOGIN_MUST_USE_SECURITY_TOKEN
The user must add a security token to the end of the password to log in.

MALFORMED_ID
An ID must be either 15 characters, or 18 characters with a valid case-insensitive extension. There is also an exception code of the same name.

MANAGER_NOT_DEFINED
A manager has not been defined for the specified approval process.

MASSMAIL_RETRY_LIMIT_EXCEEDED
A mass mail retry failed because your org has exceeded its mass mail retry limit.

MASS_MAIL_LIMIT_EXCEEDED
The org has exceeded its daily limit for mass email. Mass email messages can't be sent again until the next day.

MAXIMUM_CCEMAILS_EXCEEDED
You have exceeded the maximum number of specified CC addresses in a workflow email alert.

MAXIMUM_DASHBOARD_COMPONENTS_EXCEEDED
You have exceeded the document size limit for a dashboard.

MAXIMUM_HIERARCHY_LEVELS_REACHED
You have reached the maximum number of levels in a hierarchy.

MAXIMUM_SIZE_OF_ATTACHMENT
You have exceeded the maximum size of an attachment.

MAXIMUM_SIZE_OF_DOCUMENT
You have exceeded the maximum size of a document.

MAX_ACTIONS_PER_RULE_EXCEEDED
You have exceeded the maximum number of actions per rule.

MAX_ACTIVE_RULES_EXCEEDED
You have exceeded the maximum number of active rules.

MAX_APPROVAL_STEPS_EXCEEDED
You have exceeded the maximum number of approval steps for an approval process.

MAX_FORMULAS_PER_RULE_EXCEEDED
You have exceeded the maximum number of formulas per rule.

MAX_RULES_EXCEEDED
You have exceeded the maximum number of rules for an object.

MAX_RULE_ENTRIES_EXCEEDED
You have exceeded the maximum number of entries for a rule.

MAX_TASK_DESCRIPTION_EXCEEDED
The task description is too long.

MAX_TM_RULES_EXCEEDED
You have exceeded the maximum number of rules per Territory.

MAX_TM_RULE_ITEMS_EXCEEDED
You have exceeded the maximum number of rule criteria per rule for a Territory.

MERGE_FAILED
A merge operation failed.

MISSING_ARGUMENT
You did not specify a required argument.

NONUNIQUE_SHIPPING_ADDRESS
You can't insert a reduction order item if the original order shipping address is different from the shipping address of other items in the reduction order.

NO_APPLICABLE_PROCESS
A `process()` request failed because the record submitted does not satisfy the entry criteria of any active approval processes for which the user has permission.

NO_ATTACHMENT_PERMISSION
Your org does not permit email attachments.

NO_INACTIVE_DIVISION_MEMBERS
You can't add members to an inactive Division.

NO_MASS_MAIL_PERMISSION
You don't have permission to send the email. You must have "Mass Email" to send mass mail or "Send Email" to send individual email.

NUMBER_OUTSIDE_VALID_RANGE
The number specified is outside the valid range of values.

NUM_HISTORY_FIELDS_BY_SOBJECT_EXCEEDED
The number of history fields specified for the sObject exceeds the allowed limit.

OP_WITH_INVALID_USER_TYPE_EXCEPTION
The operation you attempted can't be performed for one or more users. For example, you can't add high-volume portal users to a group.

OPTED_OUT_OF_MASS_MAIL
An email can't be sent because the specified User has opted out of mass mail.

PACKAGE_LICENSE_REQUIRED
The logged-in user can't access an object that is in a licensed package without a license for the package.

PORTAL_USER_ALREADY_EXISTS_FOR_CONTACT
A create User operation failed because you can't create a second portal user under a Contact.

PRIVATE_CONTACT_ON_ASSET
You can't have a private contact on an asset.

RECORD_IN_USE_BY_WORKFLOW
You can't access a record that's in use by a workflow or approval process.

REQUEST_RUNNING_TOO_LONG
A request that has been running too long is canceled.

REQUIRED_FIELD_MISSING
A call requires a field that was not specified.

SELF_REFERENCE_FROM_TRIGGER
You can't recursively update or delete the same object from an Apex trigger. This error often occurs when:

- You try to update or delete an object from within its before trigger.
- You try to delete an object from within its after trigger.

This error occurs with both direct and indirect operations. The following is an example of an indirect operation:

1. A request is submitted to update Object A.
2. A `before update` trigger on object A creates an object B.
3. Object A is updated.
4. An `after insert` trigger on object B queries object A and updates it. This update is an indirect update of object A because of the before trigger of object A, so an error is generated.

`SHARE_NEEDED_FOR_CHILD_OWNER`
If a parent record has a child record that needs a sharing rule, you can't delete the sharing rule for the parent record.

`SINGLE_EMAIL_LIMIT_EXCEEDED`
(API version 18.0 and later) The org has exceeded its daily limit for individual emails. Individual email messages can't be sent again until the next day.

`STANDARD_PRICE_NOT_DEFINED`
Custom prices can't be defined without corresponding standard prices.

`STORAGE_LIMIT_EXCEEDED`
You have exceeded your org's storage limit.

`STRING_TOO_LONG`
The specified string exceeds the maximum allowed length.

`TABSET_LIMIT_EXCEEDED`
You have exceeded the number of tabs allowed for a tabset.

`TEMPLATE_NOT_ACTIVE`
The template specified is unavailable. Specify another template or make the template available for use.

`TERRITORY_REALIGN_IN_PROGRESS`
An operation can't be performed because a territory realignment is in progress.

`TEXT_DATA_OUTSIDE_SUPPORTED_CHARSET`
The specified text uses a character set that is not supported.

`TOO_MANY_APEX_REQUESTS`
Too many Apex requests have been sent. This error is transient. Resend your request after a short wait.

`TOO_MANY_ENUM_VALUE`
A request failed because too many values were passed in for a multi-select picklist. You can select a maximum of 100 values for a multi-select picklist.

`TRANSFER_REQUIRES_READ`
You can't assign the record to the specified User because the user does not have read permission.

`UNABLE_TO_LOCK_ROW`
A deadlock or timeout condition has been detected.

- A deadlock involves at least two transactions that are attempting to update overlapping sets of objects. If the transaction involves a summary field, the parent objects are locked, making these transactions especially prone to deadlocks. To debug, check your code for deadlocks and correct. Deadlocks are generally not the result of an issue with Salesforce operations.
- A timeout occurs when a transaction takes too long to complete, for example, when replacing a value in a picklist or changing a custom field definition. The timeout state is temporary. No corrective action is needed.

If an object in a batch can't be locked, the entire batch fails with this error. Errors with this status code contain the IDs of the records that couldn't be locked, when available, in the error message.

`UNAVAILABLE_RECORDTYPE_EXCEPTION`
The appropriate default record type could not be found.

`UNDELETE_FAILED`
An object could not be undeleted because it does not exist or has not been deleted.

`UNKNOWN_EXCEPTION`
The system encountered an internal error. Report this problem to Salesforce.

Note: Do not report this exception code to Salesforce if it results from a `sendEmail()` call. The `sendEmail()` call returns this exception code when it is used to send an email to one or more recipients who have the **Email Opt Out** option selected.

`UNSPECIFIED_EMAIL_ADDRESS`
The specified user does not have an email address.

`UNSUPPORTED_APEX_TRIGGER_OPERATION`
You can't save recurring events with an Apex trigger.

`UNVERIFIED_SENDER_ADDRESS`
A `sendEmail()` call attempted to use an unverified email address defined in the OrgWideEmailAddress object.

`WEBLINK_SIZE_LIMIT_EXCEEDED`
The size of a WebLink URL or JavaScript code exceeds the limit.

`WEBLINK_URL_INVALID`
The WebLink URL has failed the URL string validation check.

`WRONG_CONTROLLER_TYPE`
The controller type for your Visualforce email template does not match the object type being used.

If you receive a status code not listed in the previous table, contact Customer Support.

ExtendedErrorDetails

Reserved for future use. An `ExtendedErrorDetails` element contains extra detailed information about an error. The `ExtendedErrorDetails` element has the following properties.

Name	Type	Description
`extendedErrorCode`	ExtendedErrorCode	A code that characterizes the extended error details.
`extended error property`	Varies	An extended error property that contains more information about the error. The property name and value vary based on the extended error code.

Duplicate Management Data Types

DuplicateError

Contains information about an error that occurred when an attempt was made to save a duplicate record. Use if your organization has set up duplicate rules, which are part of the Duplicate Management feature.

Fields

Field	Details
duplicateResult	**Type** DuplicateResult **Description** The details of a duplicate rule and duplicate records found by the duplicate rule.
fields	**Type** string[] **Description** Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.
message	**Type** string **Description** Error message text.
statusCode	**Type** StatusCode **Description** A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization (see Generating the WSDL File for Your Organization).

Usage

DuplicateError and its constituent objects are available to organizations that use duplicate rules.

DuplicateError is a data type of Error.

To process duplicates, loop through all the Error objects in the `errors` field on SaveResult. An Error object with a data type of DuplicateError contains information about an error that occurred when an attempt was made to save a duplicate record. To access information about the duplicates, use the `duplicateResult` field.

Java Sample

Here is a sample that shows how to see if there are any errors on the saveResult with a data type of DuplicateError. If so, duplicates were detected. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
if (!saveResult.isSuccess()) {
    for (Error e : saveResult.getErrors()) {
        if (e instanceof DuplicateError) {
            System.out.println("Duplicate(s) Detected for lead with ID: " +
leads[i].getId());
            System.out.println("ERROR MESSAGE: " + e.getMessage());
```

```
            System.out.println("STATUS CODE: " + e.getStatusCode());
            DuplicateResult dupeResult = ((DuplicateError)e).getDuplicateResult();
            System.out.println("Found the following duplicates...");
            for (MatchResult m : dupeResult.getMatchResults()) {
                if (m.isSuccess()) {
                    System.out.println("The match rule that was triggered was " +
m.getRule());
                    for (MatchRecord mr : m.getMatchRecords()) {
                       System.out.println("Your record matched " + mr.getRecord().getId()
 + " of type "
                            + mr.getRecord().getType());
                        System.out.println("The match confidence is " +
mr.getMatchConfidence());
                    }
                }
            }
        }
    }
}
```

DuplicateResult

Represents the details of a duplicate rule that detected duplicate records and information about those duplicate records.

Fields

Field	Details
`allowSave`	**Type** boolean **Description** `true` if duplicates are allowed to be saved. `false` if duplicates are not allowed to be saved.
`duplicateRule`	**Type** string **Description** The name of the duplicate rule that detected duplicate records.
`duplicateRuleEntityType`	**Type** string **Description** The name of the duplicate rule that detected duplicate records.
`errorMessage`	**Type** string

Field	Details
	Description The error message configured by the administrator to warn users they are potentially creating duplicate records. This message is associated with a duplicate rule.
`matchResults`	**Type** MatchResult **Description** The duplicate records and related match information.

Usage

DuplicateResult and its constituent objects are available to organizations that use duplicate rules.

Java Sample

Here is a sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
package com.doc.example;

import java.io.FileNotFoundException;

import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class SaveResultsWithDupeHeader {

    private PartnerConnection partnerConnection = null;
    static SaveResultsWithDupeHeader tester;

    public static void main(String[] args) {
        tester = new SaveResultsWithDupeHeader();
        try {
            tester.demoDuplicateRuleHeader();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    /*
     * Make sure that you have an active lead duplicate rule linked to an active matching
 rule. This method tries to save
     * an array of leads and inspects whether any duplicates were detected
     */
   public void demoDuplicateRuleHeader() throws FileNotFoundException, ConnectionException
 {
        // Create the configuration for the partner connection
```

```
        ConnectorConfig config = new ConnectorConfig();
        config.setUsername("user@domain.com");
        config.setPassword("secret");
        config.setAuthEndpoint("authEndPoint");
        config.setTraceFile("traceLogs.txt");
        config.setTraceMessage(true);
        config.setPrettyPrintXml(true);

        // Initialize the connection
        partnerConnection = new PartnerConnection(config);

        // Get the leads that have to be saved
        SObject[] leads = getLeadsForInsertOrUpdate();

        /* Set a duplicate rule header to return a result if duplicates are detected
         * This sets the allowSave, includeRecordDetails, and runAsCurrentUser flags to
true
         */
        partnerConnection.setDuplicateRuleHeader(true, true, true);

        // Save the leads
        SaveResult[] saveResults = partnerConnection.create(leads);

        // Check the results to see if duplicates were detected
        for (int i = 0; i < leads.length; i++) {
            SaveResult saveResult = saveResults[i];
            if (!saveResult.isSuccess()) {
                for (Error e : saveResult.getErrors()) {
                // See if there are any errors on the saveResult with a data type of
DuplicateError
                    if (e instanceof DuplicateError) {
                        System.out.println("Duplicate(s) Detected for lead with ID: " +
leads[i].getId());
                        System.out.println("ERROR MESSAGE: " + e.getMessage());
                        System.out.println("STATUS CODE: " + e.getStatusCode());
                        DuplicateResult dupeResult =
((DuplicateError)e).getDuplicateResult();
                        System.out.println("Found the following duplicates...");
                        for (MatchResult m : dupeResult.getMatchResults()) {
                            if (m.isSuccess()) {
                                System.out.println("The match rule that was triggered was
 " + m.getRule());
                                for (MatchRecord mr : m.getMatchRecords()) {
                                    System.out.println("Your record matched " +
mr.getRecord().getId() + " of type "
                                            + mr.getRecord().getType());
                                    System.out.println("The match confidence is " +
mr.getMatchConfidence());
                                    for (FieldDiff f : mr.getFieldDiffs()) {
                                        System.out.println("For field " + f.getName() + "
 field difference is "
                                                + f.getDifference().name());
                                    }
                                }
```

```
                        }
                    }
                }
            }
        }
    }

    // Clear the duplicate rule header
    partnerConnection.clearDuplicateRuleHeader();
}

/**
 * The assumption here is that this method is retrieving leads from either UI, a data
source, etc
 */
private SObject[] getLeadsForInsertOrUpdate() {
    return new SObject[0];
}

}
```

MatchResult

Represents the duplicate results for a matching rule.

Fields

Field	Details
errors	**Type** Error[] **Description** Errors that occurred during matching for the matching rule.
entityType	**Type** string **Description** The entity type of the matching rule.
matchEngine	**Type** string **Description** The match engine for the matching rule.
matchRecords	**Type** MatchRecord[] **Description** Information about the duplicates detected by the matching rule.

Field	Details
`rule`	**Type** string **Description** The developer name of the matching rule that detected duplicates.
`size`	**Type** int **Description** The number of duplicates detected by the matching rule.
`success`	**Type** boolean **Description** `true` if the matching rule successfully ran. `false` if there's an error with the matching rule.

Usage

MatchResult and its constituent objects are available to organizations that use duplicate rules.

There is 1 MatchResult for each saved record that has duplicates. The MatchResult contains all duplicates for that saved record.

Java Sample

Here is a sample that shows how to display the ID and type of all duplicates detected when leads are saved. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (MatchResult m : dupeResult.getMatchResults()) {
    if (m.isSuccess()) {
        System.out.println("The match rule that was triggered was " + m.getRule());
        for (MatchRecord mr : m.getMatchRecords()) {
            System.out.println("Your record matched " + mr.getRecord().getId() + " of type
 "
                 + mr.getRecord().getType());
             System.out.println("The match confidence is " + mr.getMatchConfidence());
        }
    }
}
```

MatchRecord

Represents a duplicate record detected by a matching rule.

Fields

Field	Details
`additionalInformation`	**Type** AdditionalInformationMap **Description** Other information about matched records.
`fieldDiffs`	**Type** FieldDiff[] **Description** Matching rule fields and how each field value compares for the duplicate and its matching record.
`matchConfidence`	**Type** double **Description** The ranking of how similar a matched record's data is to the data in your request. Must be equal to or greater than the value of the `minMatchConfidence` specified in your request. Returns `-1` if unused.
`record`	**Type** sObject **Description** The fields and field values for the duplicate record.

Usage

MatchRecord and its constituent objects are available to organizations that use duplicate rules.

Each MatchRecord represents a duplicate detected when a record is saved. There can be multiple MatchRecord objects for a saved record if multiple duplicates are detected.

Java Sample

Here is a sample that shows how to display the ID and type of all duplicates detected when a lead is saved. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (MatchRecord mr : m.getMatchRecords()) {
    System.out.println("Your record matched " + mr.getRecord().getId() + " of type "
        + mr.getRecord().getType());
    System.out.println("The match confidence is " + mr.getMatchConfidence());
}
```

FieldDiff

Represents the name of a matching rule field and how the values of the field compare for the duplicate and its matching record.

Fields

Field	Details
`difference`	**Type** differenceType **Description** How the values of the matching rule field compare for the duplicate and its matching record. Possible values include: • `Same`: Indicates the field values match exactly. • `Different`: Indicates that the field values do not match. • `Null`: Indicates that the field values are a match because both values are blank.
`name`	**Type** string **Description** The name of a field on a matching rule that detected duplicates.

Java Sample

Here is a sample that shows how to display the matching rule field differences when a duplicate is detected. See DuplicateResult for a full code sample that shows how to block users from entering duplicate leads and display an alert and a list of duplicates.

```
for (FieldDiff f : mr.getFieldDiffs()) {
    System.out.println("For field " + f.getName() + " field difference is "
        + f.getDifference().name());
}
```

AdditionalInformationMap

Represents other information, if any, about matched records.

Fields

Field	Details
`name`	**Type** string **Description** The name of the element.

Field	Details
`value`	**Type** string **Description** The value of the element.

System Fields

The following fields are read-only fields found on most objects. These fields are automatically updated during API operations. For example, the ID field is automatically generated during a create operation and the LastModifiedDate is automatically updated when a user modifies a record.

Field	Field Type	Description
`Id`	ID	Globally unique string that identifies a record. For information on IDs, see ID Field Type. Because this field exists in every object, it is not listed in the field table for each object. `Id` fields have Defaulted on create and Filter access.
`IsDeleted`	boolean	Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). Because this field does not appear in all objects, it is listed in the field table for each object.
	Audit Fields	
`CreatedById`	reference	ID of the User who created this record. `CreatedById` fields have Defaulted on create and Filter access.
`CreatedDate`	dateTime	Date and time when this record was created. `CreatedDate` fields have Defaulted on create and Filter access.
`LastModifiedById`	reference	ID of the User who last updated this record. `LastModifiedById` fields have Defaulted on create and Filter access.
`LastModifiedDate`	dateTime	Date and time when a user last modified this record. `LastModifiedDate` fields have Defaulted on create and Filter access.
`SystemModstamp`	dateTime	Date and time when a user or automated process (such as a trigger) last modified this record. `SystemModstamp` fields have Defaulted on create and Filter access.

If you import data into Salesforce and want to retain the audit field values of the source system, you can set the values for audit fields on the following objects: Account, ArticleVersion, Attachment, CampaignMember, Case, CaseComment, Contact, ContentVersion, Contract, Event, Idea, IdeaComment, Lead, Opportunity, Question, Task, Vote, and custom objects. The only audit field you cannot set a value for is `systemModstamp`.

1. From Setup, enter *`User Interface`* in the `Quick Find` box, then select **User Interface** under Customize.
2. Under Setup, select **Enable "Set Audit Fields upon Record Creation" and "Update Records with Inactive Owners" User Permissions**.
3. In the permission set or profile that you want to set audit fields with, enable the permission **Set Audit Fields upon Record Creation**.

4. Using the API, create a record and set its audit fields.

Not all standard objects have all audit fields. Check the Enterprise WSDL to verify which audit fields are available for a given object.

Parent Reference Fields

If an object has a relationship to a parent object, two fields are added.

- *`Parent_Name`* contains the object name of the parent. For example, Case has a `Contact` field that contains a reference to the contact parent of the case.
- *`Parent_NameId`* contains the ID of the parent. For example, Case has a `ContactId` field that refers to the contact parent of the case. This field is used in SOQL relationship queries such as the following:

```
SELECT Case.ContactId, Case.Contact.Name FROM Case
```

Even if the object can parent itself, these fields occur. For example, the Campaign object has a `Campaign` and `CampaignId` field for referencing the parent Campaign.

Required Fields

Required fields must have a non-`null` value. This rule affects the create and update calls:

- In a create call, the system automatically populates the data for certain required fields (such as system fields and the object ID fields). Similarly, if a required field has a default value (its `defaultedOnCreate attribute` is set to `true`, as described in Field in a describe result, then the system implicitly assigns a value for this field when the object is created, even if a value for this field is not explicitly passed in on the create call. For all other required fields, such as ID fields that are analogous to foreign keys in SQL, a client application must explicitly assign a value when the object is created (it cannot be `null`).
- In updates, a required field cannot be set to `null`, and many required fields can't be changed.

Any field not specified as required in the object description is optional, that is, it can be `null` when updated or created.

Some required fields for some objects require special handling.

Frequently-Occurring Fields

In addition to system fields, the following fields are found on many objects:

- `OwnerId`
- `RecordTypeId`
- `CurrencyIsoCode`

`OwnerId`

Objects have an `ownerId` field that is an reference to the user who owns that object. Ownership is an important concept that affects the security model and has other implications throughout the system. Any user can query the owner field for any record they can access. However, setting the `ownerId` field has the following limitations:

- For most users and most objects, this field can't be set directly upon insert. It is implicitly set to the current user when inserting an object.
- When creating or updating a Case or Lead, a client application (that is logged in with sufficient permissions to transfer a record) can set this field to any valid User in the organization or to any valid queue of the appropriate type in the organization.

- Updating this field via the API changes only the owner of that record. The change of ownership does not cascade to associated records as it does when you transfer record ownership in the Salesforce user interface.
- Updating this field on an account deletes the existing sharing information and reapplies the organization-wide sharing defaults and sharing rules.
- To update the `ownerId` field, the user must have the "Transfer Record" permission and Read access to the new owner.

In API version 12.0 and later, if your organization has set up opportunity teams, `OwnerId` fields behave the same for Account and Opportunity objects as for other objects. That is, if you update the `OwnerId` field in either object, any AccountShare or OpportunityShare records with `RowCause` set to Sales Team are kept. In API version 11.0 and earlier, the sharing records are deleted.

RecordTypeId

Record types are used to offer different business processes and subsets of picklist values to different User records based on their Profile settings. (In addition, person accounts use record types to manage a number of additional elements.

Record types are configured in the user interface or by creating, editing, or deleting the RecordType object in the API. Retrieve the list of valid record type IDs (String) for an object by querying the RecordType object.

The `RecordTypeId` field in an object contains the ID of the RecordType record that is associated with a standard or custom object. You can create or update this field.

Note: You can't create or update the `RecordTypeId` field on the CampaignMember records. Set the CampaignMember record type using the `CampaignMemberRecordTypeId` field on Campaign.

When specified in a create or update call, the record type ID (String) must refer to a valid record type for that object.

Note: The `RecordTypeId` field is in your organization's WSDL only if at least one record type is configured for your organization in the Salesforce user interface.

CurrencyIsoCode

For organizations that have multicurrency enabled, the `CurrencyIsoCode` field contains the string representation of the currency ISO code associated with currency values in the object. Note that the User object also has a `DefaultCurrencyIsoCode` field, which is the default currency for that user. For example, a user in France could have a `DefaultCurrencyIsoCode` set to Euros, and that would be their default currency in the application. However, the User object could have currency custom fields stored in a different currency, that will correspond to the organization currency at the time the user record is created.

API Field Properties

Fields on objects represent the details of each object and are analogous to columns in a database table. Each field on each object has one or more of the following properties:

Property	Description
Autonumber	The API creates an autonumber.
Create	Value for the field can be specified during create using the API.
Defaulted on create	When created, a default value is supplied if no other value is specified.
Delete	Value for the field can be deleted using the API.
Filter	Can be used as filter criteria in a SOQL query FROM or WHERE clause.

Property	Description
Group	Can be included in the GROUP BY clause of a SOQL query (`true`) or not (`false`). Available in API version 18.0 and later.
idLookup	Can be used to specify a record in an upsert call. The `Id` field of each object has this property and some `Name` fields. There are exceptions, so check for the property in any object you wish to upsert.
Nillable	The field can contain a null value.
Query	The field can be queried with SOQL using the API.
Restricted picklist	A picklist whose values are restricted to those values defined by a Salesforce admin. Users can't load unapproved values through the API.
Retrieve	Value of the field can be retrieved using the API.
Sort	Indicates whether a query can sort on this field (`true`) or not (`false`).
Update	Can be updated using the API.

Relationships Among Objects

Relationships associate objects with other objects. For example, a relationship can link a custom object to standard object in a related list, such as linking a custom object called Bugs to cases to track product defects associated with customer cases. To view the parent and child relationships among standard objects, see the ERD diagrams in Data Model.

Note:

- You can use parent-child relationships in SOQL queries. For more information, see Relationship Queries in the *Salesforce SOQL and SOSL Reference Guide*.
- Only lookup, external lookup, and indirect lookup relationships are available for external objects. No other relationship types are supported. See "External Object Relationships" in the Salesforce Help.

You can define different types of relationships by creating custom relationship fields on an object. The differences between relationship types include how they handle data deletion, record ownership, security, and required fields in page layouts:

- **Master-Detail (1:n)** — A parent-child relationship in which the master object controls certain behaviors of the detail object:
  - When a record of the master object is deleted, its related detail records are also deleted.
  - The `Owner` field on the detail object is not available and is automatically set to the owner of its associated master record. Custom objects on the detail side of a master-detail relationship cannot have sharing rules, manual sharing, or queues, as these require the `Owner` field.
  - The detail record inherits the sharing and security settings of its master record.
  - The master-detail relationship field is required on the page layout of the detail record.
  - By default, records can't be reparented in master-detail relationships. Administrators can, however, allow child records in master-detail relationships on custom objects to be reparented to different parent records by selecting the `Allow reparenting` option in the master-detail relationship definition.

  You can define master-detail relationships between custom objects or between a custom object and a standard object. However, the standard object cannot be on the detail side of a relationship with a custom object. In addition, you cannot create a master-detail relationship in which the User or Lead objects are the master.

When you define a master-detail relationship, the custom object on which you are working is the detail side. Its data can appear as a custom related list on page layouts for the other object.

- **Many-to-many** — You can use master-detail relationships to model *many-to-many* relationships between any two objects. A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa. For example, you create a custom object called "Bug" that relates to the standard case object such that a bug could be related to multiple cases and a case could also be related to multiple bugs. To create a many-to-many relationship, simply create a custom junction object with two master-detail relationship fields, each linking to the objects you want to relate. See the Salesforce online help for details.

  Custom objects with two master-detail relationships are supported in API version 11 and later.

  Starting in API version 34.0, the `JunctionIdList` field type lets you manipulate the many-to-many relationship of an entity directly. You no longer need to manipulate underlying junction entity records. `JunctionIdList` fields can be queried and updated like any other field on the entity. Queries or updates to `JunctionIdList` fields act as queries or updates to the underlying junction entity records. Fields of type `JunctionIdList` appear in the WSDL as an unbounded array of type ID. `JunctionIdList` is implemented in the `Task` and `Event` objects.

- **Lookup (1:n)** — This type of relationship links two objects together, but has no effect on deletion or security. Unlike master-detail fields, lookup fields are not automatically required. When you define a lookup relationship, data from one object can appear as a custom related list on page layouts for the other object. See the Salesforce online help for details.

To create relationships, use the user interface or Salesforce Metadata API.

Relabeling Fields and Tabs and the API

The user interface allows you to change the labels on some fields and tabs. Although you cannot relabel fields or tabs using the API, you can retrieve the current values. To do so, issue a `describeSObjects()` call and inspect the label field of the returned DescribeSObjectResult.

Tooling API Objects in the Enterprise WSDL

Some objects used by the Tooling API are included in the Enterprise and Partner WSDL. Use the objects from these WSDLs instead of the Tooling WSDL if you need field-level security.

The following Tooling API objects are exposed in the Enterprise and Partner WSDL.

- DataType
- EntityDefinition
- EntityParticle
- FieldDefinition
- PicklistValueInfo
- Publisher
- SearchLayout
- Service
- ServiceDataType (Reserved for future use.)
- ServiceFieldDataType (Unavailable in version 35.0 and later. Do not use.)
- RelationshipDomain
- RelationshipInfo

- UserEntityAccess
- UserFieldAccess
- WsdlDataType (Reserved for future use.)
- XmlSchema (Reserved for future use.)

For more information, use the *Tooling API Developer's Guide*.

Salesforce AppExchange Object Prefixes and the API

If you have an unmanaged package and a managed package version becomes available, the API names of custom fields, custom objects, and Scontrol objects in the package change. A namespace prefix is added to each component to make it unique: `name__c` becomes `prefix__name__c`. To move from an unmanaged package to a managed package version of the same application, export your data, uninstall the old package, and install the new package. Then review the name changes and import your data with the relevant mapping. For details, see the *ISVforce Guide*.

Custom Objects

In the user interface, you can extend your organization's data by defining custom objects. Custom objects are custom database tables that allow you to store information unique to your organization. For custom objects, the `custom` flag—a Boolean field in the describe results—is `true`.

Client applications with sufficient permissions can invoke API calls on existing custom objects. You can create custom objects with the user interface, or by using the metadata WSDL with a client application or using the Force.com IDE. For more information about using the metadata WSDL to create custom objects, see the *Lightning Platform Metadata API Developer's Guide*. For more information about the Force.com IDE, see *Salesforce Developers.*

Use the following topics to understand how the API interacts with custom objects and fields:

- Naming Conventions for Custom Objects
- Relationships Among Custom Objects
- Audit Fields for Custom Objects
- Sharing and Custom Objects
- Required Fields in Custom Objects
- Managed Packages and API Names

Naming Conventions for Custom Objects

Your Salesforce administrator defines an associated name field for each custom object during setup. Custom objects must have unique names within your organization.

In the API, the names of custom objects include a suffix of two underscores followed by a lowercase "c" . For example, a custom object labeled "Issue" in the Salesforce user interface is `Issue__c` in that organization's WSDL.

Relationships change the naming convention. See Relationships Among Custom Objects for more information.

For a custom object record to appear in the Salesforce user interface, its name field must be populated. If you use the API to create a custom object record that doesn't have a name, the record's ID is used as its name.

Relationships Among Custom Objects

Custom objects relate to other objects and behave just like standard objects, as described in Relationships Among Objects. For example, cascading deletes are supported in custom objects in a Master-Detail relationship.

Custom objects require special treatment so that they can participate in Relationship Queries. For the relationship field name of a custom object, `__r` is appended to the name to create the ID. Also, `__c` is appended to the name to create the parent object pointer. For example, if the relationship field name is MyRel, the name of the ID becomes `MyRelId__r`, the parent object pointer becomes `MyRel__c`, and the relationship name is `MyRel__r`. For more information, see Understanding Relationship Names, Custom Objects, and Custom Fields in the *Salesforce SOQL and SOSL Reference Guide*.

The following table summarizes whether a standard object can be:

- The master in a master-detail relationship with a custom object. Master-detail relationships involve cascading deletes and sharing rules that the parent controls.
- The lookup in a lookup relationship on a custom object. In other words, whether a custom object can have a lookup to the standard object.
- Extended with custom fields.

Standard Object	Master-Detail	Lookup	Custom Fields
Account	Yes	Yes	Yes
Campaign	Yes	Yes	Yes
Case	Yes	Yes	Yes
Contact	Yes	Yes	Yes
Contract	Yes	Yes	Yes
Event	No	No	Yes
Lead	No	No	Yes
Opportunity	Yes	Yes	Yes
Product2	No	Yes	Yes
Solution	Yes	Yes	Yes
Task	No	No	Yes
User	No	Yes	Yes

Custom objects can also have many-to-many relationships with other custom objects or standard objects. A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa. For more information, see Relationships Among Objects.

Audit Fields for Custom Objects

Custom objects can have the same audit fields as standard objects. When you create a custom object, the four audit fields, `CreatedById`, `CreatedDate`, `LastModifiedById`, and `LastModifiedDate`, are created and populated for the object. These fields are read only. If you import data into Salesforce custom objects and want to retain the audit field values from the source system, you can set the values when you create the custom objects. The only audit field you cannot set a value for is `systemModstamp`. Your organization must be API enabled, and you must have the "Modify All Data" permission.

1. From Setup, enter *`User Interface`* in the `Quick Find` box, then select **User Interface** under Customize.
2. Under Setup, select **Enable "Set Audit Fields upon Record Creation" and "Update Records with Inactive Owners" User Permissions**.
3. In the permission set or profile that you want to set audit fields with, enable the permission **Set Audit Fields upon Record Creation**.
4. Using the API, create a record and set its audit fields.

Note these restrictions:

- `CreatedDate` can't be greater than the `LastModifiedDate`.
- You can't set any date field to be greater than the current time.

For more information about audit fields, see System Fields.

Sharing and Custom Objects

A sharing rule object is created for each custom object that does not have a master-detail relationship to another object. They are similar to standard object sharing rules, for example AccountOwnerSharingRule. If the user creating the custom object has the "Manage Sharing" permission, a sharing rule object is automatically created for it.

Apex sharing reasons can be retrieved describing the custom object's sharing object, and examining the information in the `rowCause` field. The name of a sharing object for each custom object is of the form: *`MyObjectName`*__Share, similar to AccountShare and other standard object sharing objects.

Tags and Custom Objects

When a custom object is created, a Tag object related to it is also created. These object names are of the form: *`MyObjectName`*__Tag, similar to AccountTag and other standard object tag objects.

Required Fields in Custom Objects

In the user interface, you can mark a custom field as required, and this rule is also enforced in the API. Each custom field has a `isRequired` field, with a data type boolean. The default value is `false`. If set to `true`, each request supplies a value (or leaves the current value) to this field. Otherwise, the request fails. When the value is set to `true`, the next time the field is edited or created, the validation applies. If no value is supplied or default value specified, the request fails.

To edit the `isRequired` field, you must log in as a user with the "Customize Application" permission.

If you change a custom object field to be required in an existing client application or integration, be sure that a value is supplied for that field. For example, if the custom picklist field `Education Level` on the contact object is required, supply a default value for that custom field. If a required field does not have a specified or default value, an error with the status code `REQUIRED_FIELD_MISSING` is returned.

Managed Packages and API Names

If you have an unmanaged package and a managed package version becomes available, the API names of custom fields, custom objects, and Scontrol objects in the package change. A namespace prefix is added to each component to make it unique: *`name`*`__c` becomes *`prefix`*`__`*`name`*`__c`. To move from an unmanaged package to a managed package version of the same application, export your data, uninstall the old package, and install the new package. Then review the name changes and import your data with the relevant mapping. For details, see the *ISVforce Guide*.

External Objects

External objects are supported in API version 32.0 and later. External objects are similar to custom objects, but external object record data is stored outside your Salesforce organization. For example, perhaps you have data that's stored on premises in an enterprise resource planning (ERP) system. Instead of copying the data into your org, you can use external objects to access the data in real time via web service callouts.

External objects are available with Salesforce Connect and Files Connect. Each external object is associated with an external data source definition in your Salesforce organization.

An external data source specifies how to access an external system. Salesforce Connect uses external data sources to access data that's stored outside your Salesforce organization. Files Connect uses external data sources to access third-party content systems. External data sources have associated external objects, which your users and the Lightning Platform use to interact with the external data and content.

By accessing record data on demand, external objects always reflect the current state of the external data. You don't have to manage a copy of that data in Salesforce, so you're not wasting storage and resources keeping data in sync.

External objects are best used when you have a large amount of data that you can't or don't want to store in your Salesforce organization, and you need to use only a small amount of data at any one time.

See "Define External Objects" in the Salesforce Help for how to create and modify external objects.

Naming Conventions for External Objects

Object names must be unique across all standard, custom, and external objects in the org.

In the API, the names of external objects are identified by a suffix of two underscores immediately followed by a lowercase "x" character. For example, an external object named "ExtraLogInfo" in the Salesforce user interface is seen as `ExtraLogInfo__x` in that organization's WSDL.

We recommend that you make object labels unique across all standard, custom, and external objects in the org.

External Object Relationships

External objects support standard lookup relationships, which use the 18-character Salesforce record IDs to associate related records with each other. However, data that's stored outside your Salesforce org often doesn't contain those record IDs. Therefore, two special types of lookup relationships are available for external objects: external lookups and indirect lookups. See "External Object Relationships" in the Salesforce Help for details.

Feature Support for External Objects

Most of the Salesforce features that support custom objects also support external objects. However, there are exceptions, and some features have special limitations and considerations for external objects. See the following topics in the Salesforce Help.

- Salesforce Compatibility Considerations for Salesforce Connect—All Adapters
- Considerations for Salesforce Connect—All Adapters

Salesforce Connect Adapters

Salesforce Connect uses a protocol-specific adapter to connect to an external system and access its data. This table describes the available adapters.

Salesforce Connect Adapter	Description	Where to Find Callout Limits
Cross-org	Uses the Lightning Platform REST API to access data that's stored in other Salesforce orgs.	No callout limits. However, each callout counts toward the API usage limits of the provider org. *Salesforce Help*: API Usage Considerations for Salesforce Connect—Cross-Org Adapter *Salesforce Limits Quick Reference Guide*: API Request Limits and Allocations
OData 2.0 OData 4.0	Uses Open Data Protocol to access data that's stored outside Salesforce. The external data must be exposed via OData producers.	*Salesforce Help*: General Limits for Salesforce Connect—OData 2.0 and 4.0 Adapters
Custom adapter created via Apex	You use the Apex Connector Framework to develop your own custom adapter when the other available adapters aren't suitable for your needs. A custom adapter can obtain data from anywhere. For example, some data can be retrieved from anywhere in the Internet via callouts, while other data can be manipulated or even generated programmatically.	*Apex Developer Guide*: Callout Limits and Limitations *Apex Developer Guide*: Execution Governors and Limits

Files Connect Adapters

Several Files Connect adapters are also available:

- Google Drive
- Box
- SharePoint Online
- OneDrive for Business

For more information about setting up Files Connect adapters see, The Files Connect Process.

For more information about Salesforce Connect, see “Salesforce Connect” in the Salesforce Help.

For details on using the Apex Connector Framework, see “Salesforce Connect” and “DataSource Namespace” in the *Apex Code Developer's Guide*.

CHAPTER 3 API Call Basics

In this chapter ...

API calls represent specific operations that your client applications can invoke at runtime to perform tasks, for example:

- Query data in your organization.
- Add, update, and delete data.
- Obtain metadata about your data.
- Run utilities to perform administration tasks.

Using your development environment, you can construct Web service client applications that use standard Web service protocols to programmatically:

- Log in to the login server (`login()`) and receive authentication information to be used for subsequent calls
- Query your organization's information (`query()`, `queryAll()`, `queryMore()`, and `retrieve()` calls)
- Perform text searches across your organization's information (`search()` call)
- Create, update, and delete data (`create()`, `merge()`, `update()`, `upsert()`, `delete()`, and `undelete()` calls)
- Perform administrative tasks, such as retrieving user information (`getUserInfo()` call), changing passwords (`setPassword()` and `resetPassword()` calls), and getting the system time (`getServerTimestamp()` call)
- Replicate data locally (`getDeleted()` and `getUpdated()` calls)
- Obtain and navigate metadata about your organization's data (`describeGlobal()`, `describeSObject()`, `describeSObjects()`, `describeLayout()`, and `describeTabs()` calls)
- Work with approval processes (`process()`)
- Return category groups and categories from your organization (`describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()`).

See Core Calls, Describe Calls, and Utility Calls for complete details about each call.

Characteristics of API Calls

All API calls are:

- **Service Requests and Responses**—Your client application prepares and submits a service request to the Lightning Platform Web Service via the API, the Lightning Platform Web Service processes the request and returns a response, and the client application handles the response.
- **Synchronous**—Once the API call is invoked, your client application waits until it receives a response from the service. Asynchronous calls are not supported.
- **Committed Automatically Versus Rollback on Error**—By default, every operation that writes to a Salesforce object is committed automatically. This is analogous to the AUTOCOMMMIT setting in SQL. For `create()`, `update()`, and `delete()` calls that attempt to write to multiple records for an object, the write operation for each record is treated as a separate transaction. For example, if a client application attempts to create two new accounts, they're created using mutually exclusive insert operations that succeed or fail individually, not as a group.

  For API version 20.0 and later, there is an AllOrNoneHeader header that allows a call to roll back all changes unless all records are processed successfully. This header is supported by the `create()`, `delete()`, `undelete()`, `update()`, and `upsert()` calls.

Note: The default behavior means that client applications may need to handle some failures: for example, if you create an opportunity that has shipments (a custom object), and the opportunity line item gets created but the shipment creation fails, if your business rules required all opportunities be created with shipment, your client application would need to roll back the opportunity creation. The easiest way to do this is to use AllOrNoneHeader.

Factors that Affect Data Access

When using the API, the following factors affect access to your organization's data:

Access

Your organization must be enabled for API access.

Objects may not be available until you contact Salesforce and request access. For example Territory is visible only if territory management has been enabled in the application. Such requirements are in the "Usage" section for each object.

Sometimes a feature must be used once before objects related to it can be accessed with the API. For example, the `recordTypeIds` is available only after at least one record type has been created for your organization in the user interface.

To investigate data access issues, you can start by inspecting the WSDL:

- **Enterprise WSDL**: The generated enterprise WSDL file contains all of the objects that are available to your organization. By using the API, a client application can access objects that are defined in your enterprise WSDL file.
- **Partner WSDL**: When using the generated partner WSDL file, a client application can access objects that are returned in the `describeGlobal()` call.

Object-Level and Field-Level Security

The API respects object-level and field-level security configured in the user interface. You can access objects and fields only if the logged-in user's permissions and access settings allow such access. For example, fields that are not visible to a given user are not returned in a `query()` or `describeSObjects()` call. Similarly, read-only fields can't be updated.

User Permissions

A user attempting to access the API must have the permission "API Enabled" selected. It's selected by default.

Your client application logs in as a user called a *logged-in* user. The logged-in user's permissions grant or deny access to specific objects and fields in your organization:

- **Read**—Users can only view objects of this type.
- **Create**—Users can read and create objects of this type.
- **Edit**—Users can read and update objects of this type.
- **Delete**—Users can read, edit, and delete objects of this type.

User permissions do not affect field-level security. If field-level security specifies that a field is hidden, users with "Read" on that object can view only those fields that are not hidden on the record. In addition, users with "Read" on an object can view only those records that sharing settings allow. The one exception is the "Edit Read Only Fields" permission, which gives users the ability to edit fields marked as read only via field-level security.

Sharing

For most API calls, data that is outside of the logged-in user's sharing model is not returned. Users are granted the most permissive access that is available to them, either through organization-wide defaults or manual record sharing, just as in the application.

User Permissions that Override Sharing

- **View All**—Users can view all records associated with this object, regardless of sharing settings.
- **Modify All**—Users can read, edit, delete, transfer, and approve all records associated with this object, regardless of sharing settings.
- **Modify All Data**—users can read, edit, delete, transfer, and approve all records regardless of sharing settings. This permission is not an object-level permission, unlike "View All" and "Modify All."

To protect the security of your data, give the logged-in user only the permissions needed to successfully execute all the calls made by the application. For large integration applications, "Modify All Data" may speed up call response times. If you are loading a large number of records, use the Bulk API instead.

Related Objects

Some objects depend on other objects for permission. For example, AccountTeamMember follows sharing on the associated permission-assigned object such as the Account record. Similarly, a Partner depends on the permissions in the associated .

Ownership changes to a record do not automatically cascade to related records. For example, if ownership changes for a given Account, ownership does not then automatically change for any Contract associated with that Account—each ownership change must be made separately and explicitly by the client application.

Object Properties

To create an object with the `create()` call, the object's `createable` attribute must be set to `true`. To determine what operations are allowed on a given object, your client application can invoke the `describeSObjects()` call on the object and inspect the properties in the DescribeSObjectResult.

Note: `replicatable` allows`getUpdated()` and `getDeleted()` calls.

Page Layouts and Record Types

Requirements defined in the Salesforce user interface for page layouts and record types are not enforced by the API:

- Page layouts can specify whether a given field is required, but the API does not enforce such layout-specific field restrictions or validations in `create()` and `update()` calls. It's up to the client application to enforce any such constraints, if applicable.
- Record types can control which picklist values can be chosen in a given record and which page layouts users with different profiles can see. However, such rules that are configured and enforced in the user interface are not enforced in the API. For example, the API does not validate whether the value in a picklist field is allowed per any record type restrictions associated with the profile of the logged-in user. Similarly, the API does not prevent a client application from adding data to a particular field simply because that field does not appear in a layout associated with the profile of the logged-in user.

Referential Integrity

To ensure referential integrity, the API forces or prevents certain behaviors:

- ID values in reference fields are validated in `create()` and `update()` calls.

- If a client application deletes a record, then its children are automatically deleted as part of the call if the `cascadeDelete` property on ChildRelationship for that child has a value of `true`. For example, if a client application deletes an Opportunity, then any associated OpportunityLineItem records are also deleted. However, if an OpportunityLineItem is not deletable or is currently being used, then deletion of the parent Opportunity fails. For example, if a client application deletes an Invoice_Statement, then any associated Line_Item records are also deleted. However, if a Line_Item is not deletable or is currently being used, then deletion of the parent Invoice_Statement fails. Use DescribeSObjectResult to view the ChildRelationship value if you want to be sure what will be deleted.

  There are certain exceptions that prevent the execution of a `cascadeDelete`. For example, you can't delete an account if it has associated cases, if it has related opportunities that are owned by other users, or if associated contacts are enabled for the Customer Portal. In addition, if you attempt to delete an account that has closed/won opportunities owned by you or has active contracts, then the delete request for that record will fail.

Package Version Settings

When your API client is referencing components in managed packages, you can specify the version of each installed package that you want to reference for your integration. This allows your API client to continue to function with specific, known behavior even when you install subsequent versions of a package. You can use the PackageVersionHeader SOAP header to set different package versions for different calls, if necessary.

A package version is a number that identifies the set of components uploaded in a package. The version number has the format *`majorNumber.minorNumber.patchNumber`* (for example, 2.1.3). The major and minor numbers increase to a chosen value during every major release. The *`patchNumber`* is generated and updated only for a patch release. Publishers can use package versions to evolve the components in their managed packages gracefully by releasing subsequent package versions without breaking existing customer integrations using the package.

Default package versions for API calls provide fallback settings if package versions are not provided by an API call. Many API clients do not include package version information, so the default settings maintain existing behavior for these clients.

You can specify the default package versions for enterprise API and partner API calls. The enterprise WSDL is for customers who want to build an integration with their Salesforce organization only. It is strongly typed, which means that calls operate on objects and fields with specific data types, such as `int` and `string`. The partner WSDL is for customers, partners, and ISVs who want to build an integration that can work across multiple Salesforce organizations, regardless of their custom objects or fields. It is loosely typed, which means that calls operate on name-value pairs of field names and values instead of specific data types.

You must associate the enterprise WSDL with specific package versions to maintain existing behavior for clients. There are options for setting the package version bindings for an API call from client applications using either the enterprise or partner WSDL. The package version information for API calls issued from a client application based on the enterprise WSDL is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. The SOAP endpoint contains a URL with a format of *`serverName`*`/services/Soap/c/`*`api_version/ID`* where *`api_version`* is the version of the API, such as 43.0, and *`ID`* encodes your package version selections when the enterprise WSDL was generated.
3. The default enterprise package version settings.

The partner WSDL is more flexible as it is used for integration with multiple organizations. If you choose the Not Specified option for a package version when configuring the default partner package versions, the behavior is defined by the latest installed package version. This means that behavior of package components, such as an Apex trigger, could change when a package is upgraded and that change would immediately impact the integration. Subscribers may want to select a specific version for an installed package for all partner API calls from client applications to ensure that subsequent installations of package versions do not affect their existing integrations.

The package version information for partner API calls is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. An API call from a Visualforce page uses the package versions set for the Visualforce page.
3. The default partner package version settings.

To configure default package versions for API calls:

1. From Setup, enter `API` in the `Quick Find` box, then select **API**.
2. Click **Configure Enterprise Package Version Settings** or **Configure Partner Package Version Settings**. These links are only available if you have at least one managed package installed in your organization.
3. Select a `Package Version` for each of your installed managed packages. If you are unsure which package version to select, you should leave the default selection.
4. Click **Save**.

Note: Installing a new version of a package in your organization does not affect the current default settings.

CHAPTER 4 Error Handling

In this chapter ...

The API calls return error data that your client application can use to identify and resolve runtime errors. If an error occurs during the invocation of most API calls, then the API provides the following types of error handling:

- For errors resulting from badly formed messages, failed authentication, or similar problems, the API returns a SOAP fault message with an associated ExceptionCode.
- For most calls, if the error occurs because of a problem specific to the query, the API returns an Error. For example, if a `create()` request contains more than 200 objects.

Error Handling for Session Expiration

When you sign on via the `login()` call, a new client session begins and a corresponding unique session ID is generated. Sessions expire automatically after a predetermined length of inactivity, which can be configured in Salesforce from Setup by clicking **Security Controls**. The default is 120 minutes (two hours). If you make an API call, the inactivity timer is reset to zero.

When your session expires, the exception code INVALID_SESSION_ID is returned. If this happens, you must invoke the `login()` call again.

More About Error Handling

For more information about errors, see the following topics:

- API Fault Element
- ExceptionCode
- Error

CHAPTER 5 Security and the API

In this chapter ...

Client applications that access your organization's Salesforce data are subject to the same security protections that are used in the Salesforce user interface. Additional protection is available for organizations that install Salesforce AppExchange managed packages if those packages contain components that access Salesforce via the API.

User Authentication

Client applications must log in using valid credentials for an organization. The server authenticates these credentials and, if valid, provides the client application with:

- a `sessionId` that must be set into the session header so that all subsequent calls to the Web service are authenticated
- a URL address (`serverUrl`) for the client application's Web service requests

Salesforce supports only the Transport Layer Security (TLS) protocol and frontdoor.jsp. Ciphers must have a key length of at least 128 bits.

User Profile and Permission Sets Configuration

An organization's Salesforce administrator controls the availability of various features and views by configuring profiles and permission sets, and assigning users to them. To access the API (to issue calls and receive the call results), a user must be granted the "API Enabled" permission. Client applications can query or update only those objects and fields to which they have access via the permissions of the logged-in user.

To create, edit, or delete a profile, from Setup, enter *`Profiles`* in the `Quick Find` box, then select **Profiles** in the Salesforce user interface. To create, edit, or delete a permission set, from Setup, enter *`Permission Sets`* in the `Quick Find` box, then select **Permission Sets**.

Note: The Web services WSDL files return all available objects and fields for an organization.

Security Token

When users log in to Salesforce via the user interface, the API, or a desktop client such as Salesforce for Outlook, Connect Offline, Connect for Office, or the Data Loader, Salesforce confirms that the login is authorized as follows.

1. Salesforce checks whether the user's profile has login hour restrictions. If login hour restrictions are specified for the user's profile, any login outside the specified hours is denied.
2. If the user has the "Two-Factor Authentication for User Interface Logins" permission, Salesforce prompts the user for a second form of authentication upon logging in. If the user's account isn't already connected to a mobile authenticator app such as Salesforce Authenticator, Salesforce first prompts the user to connect the app.
3. If the user has the "Two-Factor Authentication for API Logins" permission and has connected an authenticator app to the account, Salesforce returns an error if the user uses the standard security token. The user has to enter a verification code (time-based one-time password) generated by the authenticator app instead.
4. Salesforce then checks whether the user's profile has IP address restrictions. If IP address restrictions are defined for the user's profile, logins from an undesignated IP address are denied, and logins from a specified IP address are allowed. If the **Enforce login IP ranges on every request** session setting is enabled, the IP address restrictions are enforced for each page request, including requests from client applications.
5. If profile-based IP address restrictions are not set, Salesforce checks whether the user is logging in from a device used to access Salesforce before.
   - If the user's login is from a device and browser that Salesforce recognizes, the login is allowed.
   - If the user's login is from an IP address in your org's trusted IP address list, the login is allowed.
   - If the user's login is not from a trusted IP address or a device and browser Salesforce recognizes, the login is blocked.

Whenever a login is blocked or returns an API login fault, Salesforce has to verify the user's identity:

- For access via the user interface, the user is prompted to verify using Salesforce Authenticator (version 2 or later), or to enter a verification code.

  Note: Users aren't asked for a verification code the first time they log in to Salesforce.

- For access via the API or a client, users must add their security token to the end of their password to log in. Or, if "Two-Factor Authentication on API Logins" is set on the user profile, users enter a verification code generated by an authenticator app.

  A security token is an automatically generated key from Salesforce. For example, if a user's password is *mypassword*, and the security token is *XXXXXXXXXX*, the user must enter *mypasswordXXXXXXXXXX* to log in. Or some client applications have a separate field for the security token.

  Users can obtain their security token by changing their password or resetting their security token via the Salesforce user interface. When a user changes a password or resets a security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until the user resets the security token, changes a password, or has a password reset.

  Tip: Before you access Salesforce from a new IP address, we recommend that you get your security token from a trusted network using **Reset My Security Token**.

For more information about tokens, see "Reset Your Security Token" in the Salesforce online help.

When a user's password is changed, the user's security token is automatically reset. The user will experience a blocked login until he or she adds the automatically-generated security token to the end of his or her password or enters the new password after the administrator adds their IP address to the organization's list of trusted IP addresses.

If Single Sign-On (SSO) is enabled for your organization, users who access the API or a desktop client cannot log in to Salesforce unless their IP address is included on your organization's list of trusted IP addresses or on their profile, if their profile has IP address restrictions set. Futhermore, the delegated authentication authority usually handles login lockout policies for users with the "Uses Single Sign-On" permission. However, if the security token is enabled for your organization, then your organization's login lockout settings determine the number of times a user can attempt to log in with an invalid security token before being locked out of Salesforce. For more information, see "Setting Login Restrictions" and "Setting Password Policies" in the online help.

Sharing

In the Salesforce user interface, sharing refers to the act of granting read or write access to a user or group so that they can view or edit a record owned by other users, if the default organization access levels do not otherwise permit such access. All API calls respect the sharing model.

The following table describes the types of access levels.

API Value	Salesforce User Interface Label	API Picklist Label	Description
`None`	`Private`	`Private`	Only the record owner and Users above that role in the hierarchy can view and edit the record.
`Read`	`Read Only`	`Read Only`	All Users and Groups can view the record but not edit it. Only the owner and users above that role in the hierarchy can edit the record.
`Edit`	`Read/Write`	`Read/Write`	All Users and Groups can view and edit the record.

API Value	Salesforce User Interface Label	API Picklist Label	Description
`ReadEditTransfer`	`Read/Write/Transfer`	`Read/Write/Transfer`	All Users and Groups can view, edit, delete, and transfer the record. (Only available for cases and leads as an organization-wide default setting.)
`All`	`Full Access`	`Owner`	All Users and Groups can view, edit, transfer, delete, and share the record. (Only available for campaigns as an organization-wide default setting.)
`ControlledByParent`	`Controlled by Parent`	`Controlled By Parent`	(Contacts only.) All Users and Groups can perform an action (such as view, edit, or delete) on the contact based on whether he or she can perform that same action on the record associated with it.

Not all access levels are available for every object. See the Fields table for each object to learn which access levels are available, as well as other sharing details specific to that object.

For more information about sharing in general, see the Salesforce online help.

Note: In the API, you can create and update objects such as AccountShare and OpportunityShare that define sharing entries for records.

Implicit Restrictions for Objects and Fields

Certain objects can be created or deleted only in the Salesforce user interface. Other objects are read-only—client applications cannot `create()`, `delete()`, or `update()` such objects. Similarly, certain fields within some objects can be specified on `create()` but not on `update()`. Other fields are read-only—client applications cannot specify field values in `create()` or `update()` calls. For more information, see the respective object descriptions in Object Basics.

API Access in Salesforce AppExchange Packages

The API allows access to objects and calls based on the permissions of the user who logs into the API. To prevent security issues from arising when installed packages have components that access data via the API, Salesforce provides additional security:

- When a developer creates an AppExchange package with components that access the API, the developer can restrict the API access for those components.
- When an administrator installs an AppExchange package, the administrator can accept or reject the access. Rejecting the access cancels the installation.
- After an administrator installs a package, the administrator can restrict the API access of components in the package that access the API.

Editing API access for a package is done in the Salesforce user interface. For more information, see "Manage API and Dynamic Apex Access in Packages" in the Salesforce online help.

API access for a package affects the API requests originating from components within the package; it determines the objects that the API requests can access. If the API access for a package is not defined, then the objects that the API requests have access to are determined by the user's permissions.

The API access for a package never allows users to do more than the permissions granted to the user. API access in a package only reduces what the user's permissions allow.

Choosing `Restricted` for the `API Access` setting in a package affects the following:

- API access in a package overrides the following user permissions:
  - Author Apex
  - Customize Application
  - Edit HTML Templates
  - Edit Read Only Fields
  - Manage Billing
  - Manage Call Centers
  - Manage Categories
  - Manage Custom Report Types
  - Manage Dashboards
  - Manage Letterheads
  - Manage Package Licenses
  - Manage Public Documents
  - Manage Public List Views
  - Manage Public Reports
  - Manage Public Templates
  - Manage Users
  - Transfer Record
  - Use Team Reassignment Wizards
  - View Setup and Configuration
  - Weekly Export Data
- If `Read`, `Create`, `Edit`, and `Delete` access are not selected in the API access setting for objects, users do not have access to those objects from the package components, even if the user has the "Modify All Data" and "View All Data" permissions.
- A package with `Restricted` API access can't create new users.
- Salesforce denies access to Web service and `executeanonymous` requests from an AppExchange package that has `Restricted` access.

The following considerations also apply to API access in packages:

- Workflow rules and Apex triggers fire regardless of API access in a package.
- If a component is in more than one package in an organization, API access is unrestricted for that component in all packages in the organization regardless of the access setting.
- If Salesforce introduces a new standard object after you select restricted access for a package, access to the new standard object is not granted by default. You must modify the restricted access setting to include the new standard object.
- When you upgrade a package, changes to the API access are ignored even if the developer specified them. This ensures that the administrator installing the upgrade has full control. Installers should carefully examine the changes in package access in each upgrade during installation and note all acceptable changes. Then, because those changes are ignored, the administrator should manually apply any acceptable changes after installing an upgrade.

- S-controls are served by Salesforce and rendered inline in Salesforce. Because of this tight integration, there are several means by which an s-control in an installed package could escalate its privileges to the user's full privileges. In order to protect the security of organizations that install packages, s-controls have the following limitations:
  - For packages you are developing (that is, not installed from AppExchange), you can only add s-controls to packages with the default `Unrestricted` API access. Once a package has an s-control, you cannot enable `Restricted` API access.
  - For packages you have installed, you can enable access restrictions even if the package contains s-controls. However, access restrictions provide only limited protection for s-controls. Salesforce recommends that you understand the JavaScript in an s-control before relying on access restriction for s-control security.
  - If an installed package has `Restricted` API access, upgrades will be successful only if the upgraded version does not contain any s-controls. If s-controls are present in the upgraded version, you must change the currently installed package to `Unrestricted` API access.

To manage API access to packages, see "Manage API and Dynamic Apex Access in Packages" in the Salesforce online help.

Note: XML-RPC requests that originate from restricted packages will be denied access.

Outbound Port Restrictions

For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:

- 80: This port only accepts HTTP connections.
- 443: This port only accepts HTTPS connections.
- 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.

The port restriction applies to any feature where a port is specified, for example outbound messages, AJAX proxy, or single-sign on.

CHAPTER 6 Using the Partner WSDL

In this chapter ...

The API provides two WSDLs to choose from:

- **Enterprise Web Services WSDL**—Used by enterprise developers to build client applications for a single Salesforce organization. The enterprise WSDL is strongly typed, which means that it contains objects and fields with specific data types, such as `int` and `string`. Customers who use the enterprise WSDL document must download and re-consume it when changes are made to the custom objects or fields in their org or when they want to use a different version of the API. To access the current WSDL for your organization, log in to your Salesforce organization and from Setup, enter *`Generate Enterprise WSDL`* in the `Quick Find` box, then select **Generate Enterprise WSDL**.
- **Partner Web Services WSDL**—Used for client applications that are metadata-driven and dynamic in nature. It is particularly—but not exclusively—useful to Salesforce partners who are building client applications for multiple organizations. As a loosely typed representation of the Salesforce data model that works with name-value pairs of field names and values instead of specific data types, it can be used to access data within any organization. This WSDL is most appropriate for developers of clients that can issue a query call to get information about an object before the client acts on the object. The partner WSDL document needs to be downloaded and consumed only once per version of the API. To access the current WSDL for your organization, log in to your Salesforce organization and from Setup, enter *`Generate Partner WSDL`* in the `Quick Find` box, then select **Generate Partner WSDL**.

In general, the enterprise WSDL is more straightforward to use, while the partner WSDL is more flexible and dynamically adaptable to different organizations, allowing you to write a single application that can be used for multiple users and multiple organizations.

Obtaining the Partner WSDL File

To use the partner WSDL, download a copy of the file using either of the following methods:

- Obtain it from your organization's Salesforce administrator, or
- Generate from Setup in Salesforce (enter *API* in the `Quick Find` box, then select **API**) according to the instructions in Step 2: Generate or Obtain the Web Service WSDL.

While the enterprise WSDL file needs to be regenerated whenever custom fields or custom objects are added to an organization's Salesforce information, the partner WSDL file remains the same regardless of underlying changes in the organization's Salesforce data.

Calls and the Partner WSDL

The partner WSDL file defines exactly the same API calls found in the enterprise WSDL file. A client application using the partner WSDL will likely use the following API calls to determine an organization's metadata:

Task / Call	Description
`describeGlobal()`	Retrieves a list of available objects for your organization's data.
`describeLayout()`	Retrieves metadata about page layouts for the specified object type.
`describeSObject()`	`describeSObject()` has been superseded by `describeSObjects()`.
`describeSObjects()`	Use to obtain metadata for a given object. You can first call to retrieve a list of all objects for your organization, then iterate through the list and use to obtain metadata about individual objects.
`describeTabs()`	In the user interface, users have access to standard apps (and may also have access to custom apps) as listed in the Lightning Platform app menu at the top of the page. Selecting a standard app or custom app in the user interface allows the user to switch between the listed apps at any time.

To explore an organization's metadata, a client application can:

1. Call `describeGlobal()` to obtain a list of available objects.
2. In the returned DescribeGlobalResult object, retrieve an array of DescribeGlobalSObjectResult objects by calling `sobjects`.
3. Get the sObject type name for each returned sObject by calling `name` on the DescribeGlobalSObjectResult objects.
4. The DescribeGlobalSObjectResult object provides some metadata about the sObject, such as whether the sObject is createable or updateable. If you want to get more information about particular sObjects, like their fields and child relationships, call `describeSObjects()` by passing it an array of the sObject type names that you're interested in obtaining more information about.

sObject Reference Reuse

An sObject reference can't be reused within a single operation.

Use a different reference. For example, the following code snippet creates an account and contact with a custom field and an event using two different references:

```
SObject account = new com.sforce.soap.partner.sobject.wsc.SObject();
    account.setType("Account");
```

```
account.setField("Name","myAccount");
account.setField("XID1__c", "1");
SObject refAcc1 = new com.sforce.soap.partner.sobject.wsc.SObject();
refAcc1.setType("Account");
refAcc1.setField("XID1__c", "1");
SObject refAcc2 = new com.sforce.soap.partner.sobject.wsc.SObject();
refAcc2.setType("Account");
refAcc2.setField("XID1__c", "1");

SObject contact = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Contact");
contact.setField("LastName", "LName");
contact.setField( "XID2__c", "2");
contact.setField( "Account", refAcc1);
SObject refCon = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Contact");
contact.setField( "XID2__c", "2");


SObject event = new com.sforce.soap.partner.sobject.wsc.SObject();
contact.setType("Event");
contact.setField("Subject", "myEvent");
contact.setField( "ActivityDateTime", Calendar.getInstance());
contact.setField("DurationInMinutes", 60);
contact.setField("Who", refCon);
contact.setField("What", refAcc2);

client.create(new SObject[] { account, contact, event}); // exception thrown here
```

Any call that takes a parameter of the form `sObject[] sObjects` is subject to this limitation.

Objects, Fields, and Field Data and the Partner WSDL

The enterprise WSDL file defines all the specific objects (such as Account and Contact) in a Salesforce org. In contrast, the partner WSDL file defines a single, generic object (sObject) that represents all the objects. For a particular object, its type is defined in the `name` field in the returned DescribeSObjectResult.

With the partner WSDL, your client application code handles fields as arrays of name-value pairs that represent the field data. When referring to the name of an individual field, use the value in its `name` field of the Field type in the DescribeSObjectResult.

Languages vary in the way they handle name-value pairs and map typed values to the primitive XML data types defined in SOAP messages. With the enterprise WSDL, the mapping is handled implicitly. With the partner WSDL, however, you manually manage values and data types when building client applications. Specify the object type before you assign field values. When specifying the value of a particular field, use a value that is valid for the field (range, format, and data type). Make sure that you understand the mapping between data types in your programming language and XML primitive data types. See SOAPType for more information.

Queries and the Partner WSDL

When using the `query()` call with the partner WSDL, consider the following guidelines:

- The queryString parameter is case-insensitive. The API will accept field names in the *fieldList* using any combination of uppercase and lowercase letters. However, in the QueryResult, the case of field names (both predefined and custom fields) will match exactly the value in the `name` field of the Field type in the DescribeSObjectResult. It is recommended that you use the proper case when specifying fields in the *fieldList*.

- For the partner WSDL, the ordering of fields in the QueryResult is determined by the field order in the *fieldList*, not the field order in the WSDL file.
- The *fieldList* cannot contain duplicate field names. For example:
  - Invalid (returns an error): `"SELECT Firstname, Lastname, Firstname FROM User"`
  - Valid: `"SELECT Firstname, Lastname FROM User"`
- The QueryResult always contains all of the fields specified in the *fieldList*, even if some of the fields contain no data (`null`). Although SOAP allows you to omit fields that contain no values in the result set, the API always returns an array containing all fields.
- If you use the partner WSDL, a query that includes ID will return the ID field twice in the SOAP XML response data. Similarly, a query that does not include ID will return a single null ID field in the SOAP XML response data. For example, a query for `SELECT ID, FirstName, LastName FROM Contact` might return a SOAP XML response with records like:

```
<records xsi:type="sf:sObject" xmlns="urn:partner.soap.sforce.com">
    <sf:type>Contact</sf:type>
    <sf:Id>0038000000FrjoBQRW</sf:Id>
    <sf:Id>0038000000FrjoBQRW</sf:Id>
    <sf:FirstName>John</sf:FirstName>
    <sf:LastName>Smith</sf:LastName>
</records>
```

  This is expected behavior and something to be aware of if you are accessing the full SOAP XML response data and not using WSC to access the web service response.

Namespaces in the Partner WSDL

In XML, every tag has a defined namespace. In the `enterprise.wsdl`, namespaces are handled implicitly. When using API calls with the partner WSDL, however, you need to explicitly specify the correct namespaces for API calls, objects, and fields, and faults. This rule applies to predefined and custom objects and fields.

For	Namespace
API Calls	`urn:partner.soap.sforce.com`
sObjects	`urn:sobject.partner.soap.sforce.com`
Fields	`urn:sobject.partner.soap.sforce.com`
Faults	`urn:fault.partner.soap.sforce.com`

Package Versions and the Partner WSDL

The partner WSDL is loosely typed. This makes it more flexible for partners who want to integrate with multiple organizations. Default package versions for API calls provide fallback settings if package versions are not provided by an API call.

The behavior of a package in partner API calls is defined by the latest installed package version if the default value (`Not Specified`) is selected for the installed package. This means that behavior of package components, such as an Apex trigger, could change when a package is upgraded and that change would immediately impact the integration. Subscribers may want to select a specific version for an installed package for all partner API calls from client applications to ensure that subsequent installations of package versions do not affect their existing integrations.

An API client developer should communicate with the administrator of the default partner package version settings if these are two different roles in your organization and the developer recommends changing the settings. Alternatively, an API client developer can set the package versions in the PackageVersionHeader SOAP header for the client.

A partner that is developing a package that references another package should always supply version information for the base package in their partner API calls. This ensures that the extension package is not affected by a component being deprecated in the base package.

The package version information for partner API calls is determined by the first match in the following settings.

1. The PackageVersionHeader SOAP header.
2. An API call from a Visualforce page uses the package versions set for the Visualforce page.
3. The default partner package version settings.

To configure default package versions for API calls with the partner WSDL, see Package Version Settings.

User Interface Themes

EDITIONS

Available in: Salesforce Classic and earlier

Back in the Winter '06 release, Salesforce started supporting multiple user interface themes, allowing you to use different sets of icons and colors for the user interface. But these user interface themes do not apply when your org is using Lightning Experience.

Two user interface themes match the earlier iterations of Salesforce.

- Theme3—The "Salesforce Classic 2010 user interface theme." This interface was previously referred to as "Salesforce" or "new user interface theme." You might also be familiar with it as the Salesforce *Aloha* interface.
- Theme2—The "Salesforce Classic 2005 user interface theme." This interface was previously referred to as "Salesforce Classic" or the "classic user interface theme."

The `getUserInfo()` call returns a `getUserInfoResult` object, which includes the `userUiSkin` property. This property informs you of the user's current user interface theme.

Use the `describeQuickActions()`, `describeTabs()`, and `describeTheme()` calls and their return types to get information on theme icons and colors.

Style sheets are available to mimic the look and feel of the older user interfaces. For more information, see Styling Visualforce Pages in the *Visualforce Developer's Guide*. But if you're planning to switch to Lightning Experience, consider the Lightning Component framework, our new UI framework. See the "Lightning Components" module in the Develop for Lightning Experience Trailhead trail to learn more.

Examples Using the Partner WSDL

This section includes examples in Java and C# for making API calls using the partner WSDL. Before running these samples, perform the following steps in the quick start tutorial to get the partner WSDL file and generate the proxy client code for your development environment.

- Step 2: Generate or Obtain the Web Service WSDL
- Step 3: Import the WSDL File Into Your Development Platform

After you generate the proxy client code and set up your development environment, you can start writing your client application. First, your application needs to log into the Salesforce service using the partner authentication endpoint. After a successful login, you can execute the sample methods.

For your convenience, template classes are provided, one in Java and one in C#, that make a login call. You can use them to execute the sample methods provided later in this section.

Sample template class for Java: This sample prompts the user to enter the username, password, and authentication endpoint. Next, it logs the user in. For the authentication endpoint URL, pass in the endpoint found in the partner WSDL file.

```
import com.sforce.soap.partner.PartnerConnection;
import com.sforce.soap.partner.sobject.*;
import com.sforce.soap.partner.*;
import com.sforce.ws.ConnectorConfig;
import com.sforce.ws.ConnectionException;
import com.sforce.soap.partner.Error;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.BufferedReader;
import java.util.*;

public class PartnerSamples {
    PartnerConnection partnerConnection = null;
    private static BufferedReader reader =
        new BufferedReader(new InputStreamReader(System.in));

    public static void main(String[] args) {
        PartnerSamples samples = new PartnerSamples();
        if (samples.login()) {
            // Add calls to the methods in this class.
            // For example:
            // samples.querySample();
        }
    }

    private String getUserInput(String prompt) {
        String result = "";
        try {
          System.out.print(prompt);
          result = reader.readLine();
        } catch (IOException ioe) {
          ioe.printStackTrace();
        }
        return result;
    }

    private boolean login() {
        boolean success = false;
        String username = getUserInput("Enter username: ");
        String password = getUserInput("Enter password: ");
        String authEndPoint = getUserInput("Enter auth end point: ");

        try {
          ConnectorConfig config = new ConnectorConfig();
          config.setUsername(username);
          config.setPassword(password);

          config.setAuthEndpoint(authEndPoint);
```

```
            config.setTraceFile("traceLogs.txt");
            config.setTraceMessage(true);
            config.setPrettyPrintXml(true);

            partnerConnection = new PartnerConnection(config);

            success = true;
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        } catch (FileNotFoundException fnfe) {
            fnfe.printStackTrace();
        }

        return success;
    }

    //
    // Add your methods here.
    //
}
```

Sample template class for C#: This sample prompts the user to enter the username and password. Next, it logs the user in. The project name for this sample is assumed to be *TemplatePartner* and the Web reference name *sforce*. If these values are different for your project, make sure to change the using directive to appropriate values for your project: `using your_project_name.web_reference_name;`.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Web.Services.Protocols;
using System.Collections;
using TemplatePartner.sforce;

namespace TemplatePartner
{
    class PartnerSamples
    {
        private SforceService binding;

        static void Main(string[] args)
        {
            PartnerSamples samples = new PartnerSamples();
            if (samples.login())
            {
            // Add calls to the methods in this class.
            // For example:
            // samples.querySample();
            }
        }

        private bool login()
        {
            Console.Write("Enter username: ");
```

```
string username = Console.ReadLine();
Console.Write("Enter password: ");
string password = Console.ReadLine();

// Create a service object
binding = new SforceService();

// Timeout after a minute
binding.Timeout = 60000;

// Try logging in
LoginResult lr;
try
{

    Console.WriteLine("\nLogging in...\n");
    lr = binding.login(username, password);
}

// ApiFault is a proxy stub generated from the WSDL contract when
// the web service was imported
catch (SoapException e)
{
    // Write the fault code to the console
    Console.WriteLine(e.Code);

    // Write the fault message to the console
    Console.WriteLine("An unexpected error has occurred: " + e.Message);

    // Write the stack trace to the console
    Console.WriteLine(e.StackTrace);

    // Return False to indicate that the login was not successful
    return false;
}

// Check if the password has expired
if (lr.passwordExpired)
{
    Console.WriteLine("An error has occurred. Your password has expired.");
    return false;
}

// Set the returned service endpoint URL
binding.Url = lr.serverUrl;

// Set the SOAP header with the session ID returned by
// the login result. This will be included in all
// API calls.
binding.SessionHeaderValue = new SessionHeader();
binding.SessionHeaderValue.sessionId = lr.sessionId;

// Return true to indicate that we are logged in, pointed
// at the right URL and have our security token in place.
```

```
            return true;
        }

    //
    // Add your methods here.
    //
}
```

This partner WSDL samples are:

- Sample query and queryMore Calls
- Sample search Call
- Sample create Call
- Sample update Call

Sample query and queryMore Calls

The following Java and C# examples show usage of the `query()` and `queryMore()` calls for the partner WSDL. Each example sets the batch size of the query to 250 items returned. It then performs a query call to get the first name and last name of all contacts and iterates through the contact records returned. For each contact, it writes the contact's first name and last name to the output, or only the last name if the first name is null. Finally, if there are more items to be returned by the query, as indicated by a `QueryResult.done` property value of `false`, it calls `queryMore()` to get the next batch of items, and repeats the process until no more records are returned.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void querySample() {
    try {
        // Set query batch size
        partnerConnection.setQueryOptions(250);

        // SOQL query to use
        String soqlQuery = "SELECT FirstName, LastName FROM Contact";
        // Make the query call and get the query results
        QueryResult qr = partnerConnection.query(soqlQuery);

        boolean done = false;
        int loopCount = 0;
        // Loop through the batches of returned results
        while (!done) {
            System.out.println("Records in results set " + loopCount++
                    + " - ");
            SObject[] records = qr.getRecords();
            // Process the query results
            for (int i = 0; i < records.length; i++) {
                SObject contact = records[i];
                Object firstName = contact.getField("FirstName");
                Object lastName = contact.getField("LastName");
                if (firstName == null) {
                    System.out.println("Contact " + (i + 1) +
```

```
                                ": " + lastName
                        );
                    } else {
                        System.out.println("Contact " + (i + 1) + ": " +
                                firstName + " " + lastName);
                    }
                }
                if (qr.isDone()) {
                    done = true;
                } else {
                    qr = partnerConnection.queryMore(qr.getQueryLocator());
                }
            }
        } catch(ConnectionException ce) {
            ce.printStackTrace();
        }
        System.out.println("\nQuery execution completed.");
}
```

C# Example

```
public void querySample()
{
    try
    {
        QueryResult qr = null;
        binding.QueryOptionsValue = new sforce.QueryOptions();
        binding.QueryOptionsValue.batchSize = 250;
        binding.QueryOptionsValue.batchSizeSpecified = true;

        qr = binding.query("SELECT FirstName, LastName FROM Contact");

        bool done = false;
        int loopCount = 0;
        while (!done)
        {
            Console.WriteLine("\nRecords in results set " +
                Convert.ToString(loopCount++)
                    + " - ");
            // Process the query results
            for (int i = 0; i < qr.records.Length; i++)
            {
                sforce.sObject con = qr.records[i];
                string fName = con.Any[0].InnerText;
                string lName = con.Any[1].InnerText;
                if (fName == null)
                    Console.WriteLine("Contact " + (i + 1) + ": " + lName);
                else
                    Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
            }

            if (qr.done)
```

```
                done = true;
            else
                qr = binding.queryMore(qr.queryLocator);
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
    Console.WriteLine("\nQuery execution completed.");
}
```

Sample search Call

The following Java and C# examples show how to use the `search()` call for the partner WSDL. Each example accepts a phone number string value that is used in the SOQL query. The search call looks for phone fields that match the passed in phone value in all contacts, leads, and accounts. Next, the example iterates through the returned search results that contain the matching records, adds them to arrays, and writes their field values to the console. The record fields returned correspond to the fields specified in the SOQL query for each record type.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void searchSample(String phoneNumber) {
    try {
        // Example of phoneNumber format: 4155551212
        String soslQuery =
            "FIND {" + phoneNumber + "} IN Phone FIELDS " +
            "RETURNING " +
            "Contact(Id, Phone, FirstName, LastName), " +
            "Lead(Id, Phone, FirstName, LastName)," +
            "Account(Id, Phone, Name)";
        // Perform SOSL query
        SearchResult sResult = partnerConnection.search(soslQuery);
        // Get the records returned by the search result
        SearchRecord[] records = sResult.getSearchRecords();
        // Create lists of objects to hold search result records
        List<SObject> contacts = new ArrayList<SObject>();
        List<SObject> leads = new ArrayList<SObject>();
        List<SObject> accounts = new ArrayList<SObject>();

        // Iterate through the search result records
        // and store the records in their corresponding lists
        // based on record type.
        if (records != null && records.length > 0) {
          for (int i = 0; i < records.length; i++){
            SObject record = records[i].getRecord();
            if (record.getType().toLowerCase().equals("contact")) {
              contacts.add(record);
            } else if (record.getType().toLowerCase().equals("lead")){
```

```
              leads.add(record);
            } else if (record.getType().toLowerCase().equals("account")) {
              accounts.add(record);
            }
          }
          // Display the contacts that the search returned
          if (contacts.size() > 0) {
            System.out.println("Found " + contacts.size() +
                " contact(s):");
            for (SObject contact : contacts) {
              System.out.println(contact.getId() + " - " +
                  contact.getField("FirstName") + " " +
                  contact.getField("LastName") + " - " +
                  contact.getField("Phone")
              );
            }
          }
          // Display the leads that the search returned
          if (leads.size() > 0) {
            System.out.println("Found " + leads.size() +
                " lead(s):");
            for (SObject lead : leads) {
              System.out.println(lead.getId() + " - " +
                  lead.getField("FirstName") + " " +
                  lead.getField("LastName") + " - " +
                  lead.getField("Phone")
              );
            }
          }
          // Display the accounts that the search returned
          if (accounts.size() > 0) {
            System.out.println("Found " +
                accounts.size() + " account(s):");
            for (SObject account : accounts) {
              System.out.println(account.getId() + " - " +
                  account.getField("Name") + " - " +
                  account.getField("Phone")
              );
            }
          }
        } else {
          // The search returned no records
          System.out.println("No records were found for the search.");
        }
      } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

C# Example

```
public void searchSample(String phoneNumber)
{
```

```
try
{
    // Example of phoneNumber format: 4155551212
    String soslQuery =
        "FIND {" + phoneNumber + "} IN Phone FIELDS " +
        "RETURNING " +
        "Contact(Id, Phone, FirstName, LastName), " +
        "Lead(Id, Phone, FirstName, LastName)," +
        "Account(Id, Phone, Name)";
    // Perform SOSL query
    SearchResult sResult = binding.search(soslQuery);
    // Get the records returned by the search result
    SearchRecord[] records = sResult.searchRecords;
    // Create lists of objects to hold search result records
    ArrayList contacts = new System.Collections.ArrayList();
    ArrayList leads = new System.Collections.ArrayList();
    ArrayList accounts = new System.Collections.ArrayList();

    // Iterate through the search result records
    // and store the records in their corresponding lists
    // based on record type.
    if ((records != null) && (records.Length > 0))
    {
        for (int i = 0; i < records.Length; i++)
        {
            sObject record = records[i].record;

            if (record.type.ToLower().Equals("contact"))
            {
                contacts.Add(record);
            }
            else if (record.type.ToLower().Equals("lead"))
            {
                leads.Add(record);
            }
            else if (record.type.ToLower().Equals("account"))
            {
                accounts.Add(record);
            }
        }
        // Display the contacts that the search returned
        if (contacts.Count > 0)
        {
            Console.WriteLine("Found " + contacts.Count + " contact(s):");
            for (int i = 0; i < contacts.Count; i++)
            {
                sObject c = (sObject)contacts[i];
                Console.WriteLine(c.Any[0].InnerText + " - " +
                            c.Any[2].InnerText + " " +
                            c.Any[3].InnerText + " - " + c.Any[1].InnerText);
            }
        }
        // Display the leads that the search returned
        if (leads.Count > 0)
```

```
            {
                Console.WriteLine("Found " + leads.Count + " lead(s):");
                for (int i = 0; i < leads.Count; i++)
                {
                    sObject l = (sObject)leads[i];
                    Console.WriteLine(l.Any[0].InnerText + " - " +
                                  l.Any[2].InnerText + " " +
                                  l.Any[3].InnerText + " - " + l.Any[1].InnerText);
                }
            }
            // Display the accounts that the search returned
            if (accounts.Count > 0)
            {
                Console.WriteLine("Found " + accounts.Count + " account(s):");
                for (int i = 0; i < accounts.Count; i++)
                {
                    sObject a = (sObject)accounts[i];
                    Console.WriteLine(a.Any[0].InnerText + " - " +
                                      a.Any[2].InnerText + " - " +
                                      a.Any[1].InnerText);
                }
            }
        }
        else
        {
            // The search returned no records
            Console.WriteLine("No records were found for the search.");
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
}
```

Sample create Call

The following Java and C# examples show how to use the `create()` call for the partner WSDL. Each example creates a contact record with several fields. It iterates through the results of the create call and checks whether the operation was successful or not. If the create operation was successful, it writes the ID of the contact created to the console. Otherwise, it iterates through the errors and writes details of each error to the console. In this case, the output of the example is the ID of the new contact.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public String createSample() {
    String result = null;
    try {
        // Create a new sObject of type Contact
           // and fill out its fields.
        SObject contact = new SObject();
```

```
        contact.setType("Contact");
        contact.setField("FirstName", "Otto");
        contact.setField("LastName", "Jespersen");
        contact.setField("Salutation", "Professor");
        contact.setField("Phone", "(999) 555-1234");
        contact.setField("Title", "Philologist");

        // Add this sObject to an array
        SObject[] contacts = new SObject[1];
        contacts[0] = contact;
        // Make a create call and pass it the array of sObjects
        SaveResult[] results = partnerConnection.create(contacts);

        // Iterate through the results list
        // and write the ID of the new sObject
        // or the errors if the object creation failed.
        // In this case, we only have one result
        // since we created one contact.
        for (int j = 0; j < results.length; j++) {
            if (results[j].isSuccess()) {
                result = results[j].getId();
                System.out.println(
                    "\nA contact was created with an ID of: " + result
                );
             } else {
                // There were errors during the create call,
                // go through the errors array and write
                // them to the console
                for (int i = 0; i < results[j].getErrors().length; i++) {
                    Error err = results[j].getErrors()[i];
                    System.out.println("Errors were found on item " + j);
                    System.out.println("Error code: " +
                        err.getStatusCode().toString());
                    System.out.println("Error message: " + err.getMessage());
                }
             }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
    return result;
}
```

C# Example

```
public void createSample()
{
    try
    {
        // Create a new sObject of type Contact
        // and fill out its fields.
        sObject contact = new sforce.sObject();
        System.Xml.XmlElement[] contactFields = new System.Xml.XmlElement[6];
```

```
        // Create the contact's fields
        System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
        contactFields[0] = doc.CreateElement("FirstName");
        contactFields[0].InnerText = "Otto";
        contactFields[1] = doc.CreateElement("LastName");
        contactFields[1].InnerText = "Jespersen";
        contactFields[2] = doc.CreateElement("Salutation");
        contactFields[2].InnerText = "Professor";
        contactFields[3] = doc.CreateElement("Phone");
        contactFields[3].InnerText = "(999) 555-1234";
        contactFields[4] = doc.CreateElement("Title");
        contactFields[4].InnerText = "Philologist";

        contact.type = "Contact";
        contact.Any = contactFields;

        // Add this sObject to an array
        sObject[] contactList = new sObject[1];
        contactList[0] = contact;

        // Make a create call and pass it the array of sObjects
        SaveResult[] results = binding.create(contactList);
        // Iterate through the results list
        // and write the ID of the new sObject
        // or the errors if the object creation failed.
        // In this case, we only have one result
        // since we created one contact.
        for (int j = 0; j < results.Length; j++)
        {
            if (results[j].success)
            {
                Console.Write("\nA contact was created with an ID of: "
                                + results[j].id);
            }
            else
            {
                // There were errors during the create call,
                // go through the errors array and write
                // them to the console
                for (int i = 0; i < results[j].errors.Length; i++)
                {
                    Error err = results[j].errors[i];
                    Console.WriteLine("Errors were found on item " + j.ToString());
                    Console.WriteLine("Error code is: " + err.statusCode.ToString());
                    Console.WriteLine("Error message: " + err.message);
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
```

```
    }
}
```

Sample update Call

The following Java and C# examples show how to use the `update()` call for the Partner WSDL. Each example takes the ID of the contact to update as an argument. It creates two sObject records of type Contact—one to hold the valid passed in ID and the other has an invalid ID. Next, it sets a new phone number for the valid contact and `null` for the last name of the invalid contact. It then makes the update call and iterates through the results. For a successful update operation, it writes the ID of the contact that got updated. For a failed update operation, it writes the details of all returned errors to the console. In this case, the output is the ID of the contact that was successfully updated and an error for the invalid contact update.

To execute the sample method, you can use the corresponding Java or C# template class provided in Examples Using the Partner WSDL.

Java Example

```
public void updateSample(String id) {
  try {
      // Create an sObject of type contact
      SObject updateContact = new SObject();
      updateContact.setType("Contact");

      // Set the ID of the contact to update
      updateContact.setId(id);
      // Set the Phone field with a new value
      updateContact.setField("Phone", "(415) 555-1212");

      // Create another contact that will cause an error
      // because it has an invalid ID.
      SObject errorContact = new SObject();
      errorContact.setType("Contact");
      // Set an invalid ID on purpose
      errorContact.setId("SLFKJLFKJ");
      // Set the value of LastName to null
      errorContact.setFieldsToNull(new String[] {"LastName"});

      // Make the update call by passing an array containing
      // the two objects.
      SaveResult[] saveResults = partnerConnection.update(
         new SObject[] {updateContact, errorContact}
      );
      // Iterate through the results and write the ID of
      // the updated contacts to the console, in this case one contact.
      // If the result is not successful, write the errors
      // to the console. In this case, one item failed to update.
      for (int j = 0; j < saveResults.length; j++) {
          System.out.println("\nItem: " + j);
          if (saveResults[j].isSuccess()) {
              System.out.println("Contact with an ID of " +
                      saveResults[j].getId() + " was updated.");
          }
          else {
```

```
              // There were errors during the update call,
              // go through the errors array and write
              // them to the console.
              for (int i = 0; i < saveResults[j].getErrors().length; i++) {
                Error err = saveResults[j].getErrors()[i];
                System.out.println("Errors were found on item " + j);
                System.out.println("Error code: " +
                    err.getStatusCode().toString());
                System.out.println("Error message: " + err.getMessage());
              }
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

For more information about `setFieldsToNull` (or its equivalent in client tools other than WSC), see `fieldsToNull` and Resetting Values to null.

C# Example

```
public void updateSample(String id) {
    try
    {
        // Create an sObject of type contact
        sObject updateContact = new sObject();
        updateContact.type = "Contact";

        // Set the ID of the contact to update
        updateContact.Id = id;
        // Set the Phone field to a new value.
        // The Phone field needs to be created as an XML element.
        System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
        System.Xml.XmlElement phoneField = doc.CreateElement("Phone");
        phoneField.InnerText = "(415) 555-1212";

        // Add the Phone field to the contact
        updateContact.Any = new System.Xml.XmlElement[] {phoneField};

        // Create another contact that will cause an error
        // because it has an invalid ID.
        sObject errorContact = new sObject();
        errorContact.type = "Contact";
        // Set an invalid ID on purpose
        errorContact.Id = "SLFKJLFKJ";
        // Set the value of LastName to null
        errorContact.fieldsToNull = new String[] { "LastName" };

        // Make the update call by passing an array containing
        // the two objects.
        SaveResult[] saveResults = binding.update(
            new sObject[] {updateContact, errorContact});
        // Iterate through the results and write the ID of
```

```
        // the updated contacts to the console, in this case one contact.
        // If the result is not successful, write the errors
        // to the console. In this case, one item failed to update.
        for (int j = 0; j < saveResults.Length; j++) {
            Console.WriteLine("\nItem: " + j);
            if (saveResults[j].success)
            {
                Console.WriteLine("Contact with an ID of " +
                saveResults[j].id + " was updated.");
            }
            else
            {
                // There were errors during the update call,
                // go through the errors array and write
                // them to the console.
                for (int i = 0; i < saveResults[j].errors.Length; i++) {
                    Error err = saveResults[j].errors[i];
                    Console.WriteLine("Errors were found on item " + j.ToString());
                    Console.WriteLine("Error code: " +
                        err.statusCode.ToString());
                    Console.WriteLine("Error message: " + err.message);
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message +
            " Stack trace: " + e.StackTrace);
    }
}
```

REFERENCE

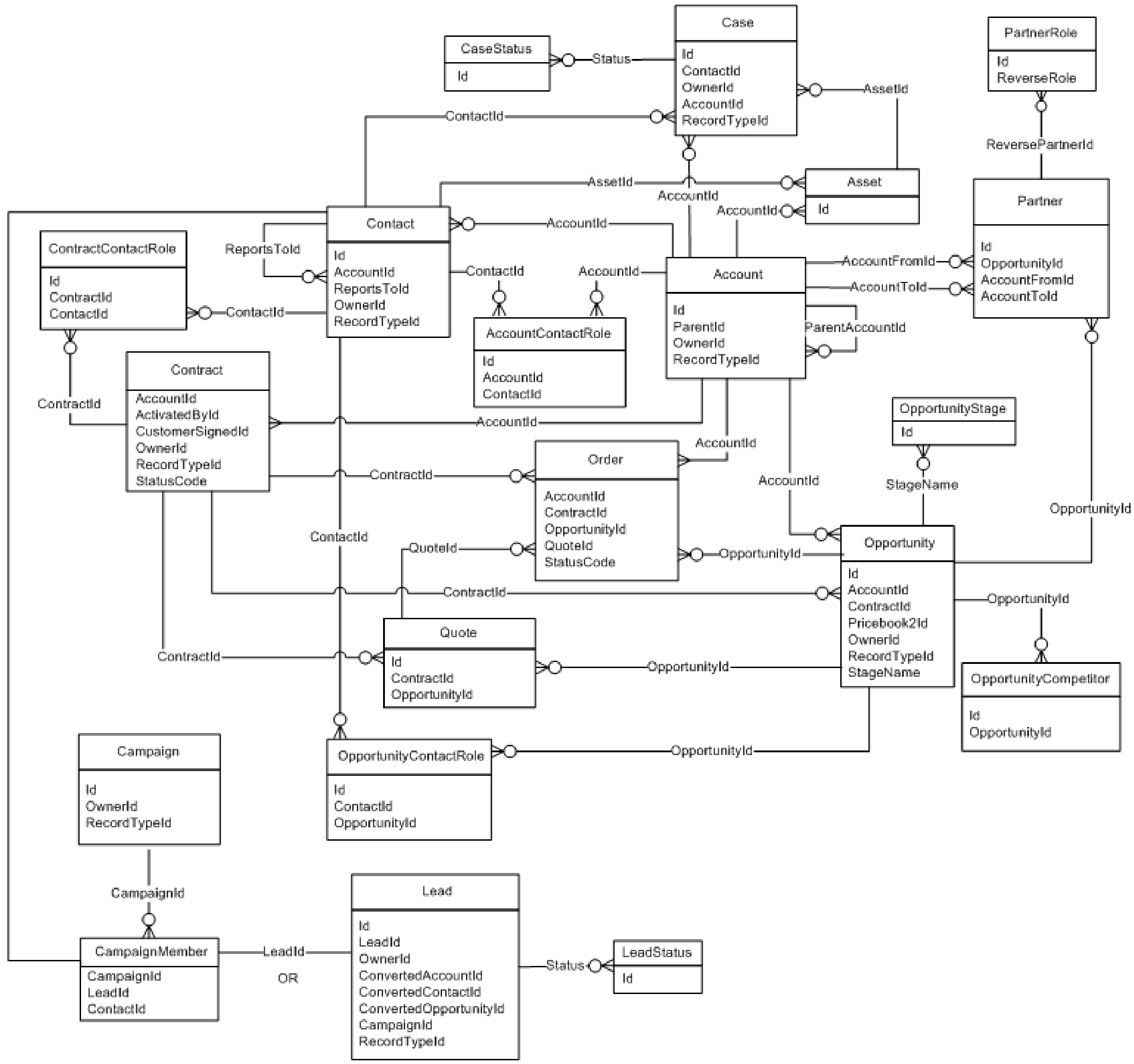
CHAPTER 7 Data Model

The entity relationship diagrams (ERDs) for standard Salesforce objects in this section illustrate important relationships between objects. Salesforce ERDs use crow's foot notation. The following ERDs are available.

- Sales Objects—includes accounts, contacts, opportunities, leads, campaigns, and other related objects
- Task and Event Objects—includes tasks and events and their related objects
- Support Objects—includes cases and solutions and their related objects
- Salesforce Knowledge Objects—includes view and vote statistics, article versions, and other related objects
- Document, Note, and Attachment Objects—includes documents, notes, and attachments and their related objects
- User, Sharing, and Permission Objects—includes users, profiles, and roles
- Profile and Permission Objects—includes users, profiles, permission sets, and related permission objects
- Record Type Objects—includes record types and business processes and their related objects
- Product and Schedule Objects—includes opportunities, products, and schedules
- Sharing and Team Selling Objects—includes account teams, opportunity teams, and sharing objects
- Customizable Forecasting Objects—includes forecasts and related objects
- Forecasts Objects—includes objects for Collaborative Forecasts.
- Territory Management 2.0 Objects—includes territories and related objects associated with Territory Management 2.0
- Territory Management—includes territories and related objects
- Process Objects—includes approval processes and related objects
- Content Objects—includes content and libraries and their related objects
- Chatter Feed Objects—includes objects related to feeds
- Work.com Badge and Reward Objects—includes badge and reward objects
- Work.com Feedback and Performance Cycle Objects—includes feedback and performance cycle objects

Each ERD includes links to the topics that describe the fields in objects related to the diagram. The data model for your custom objects depends on what you create.

Sales Objects

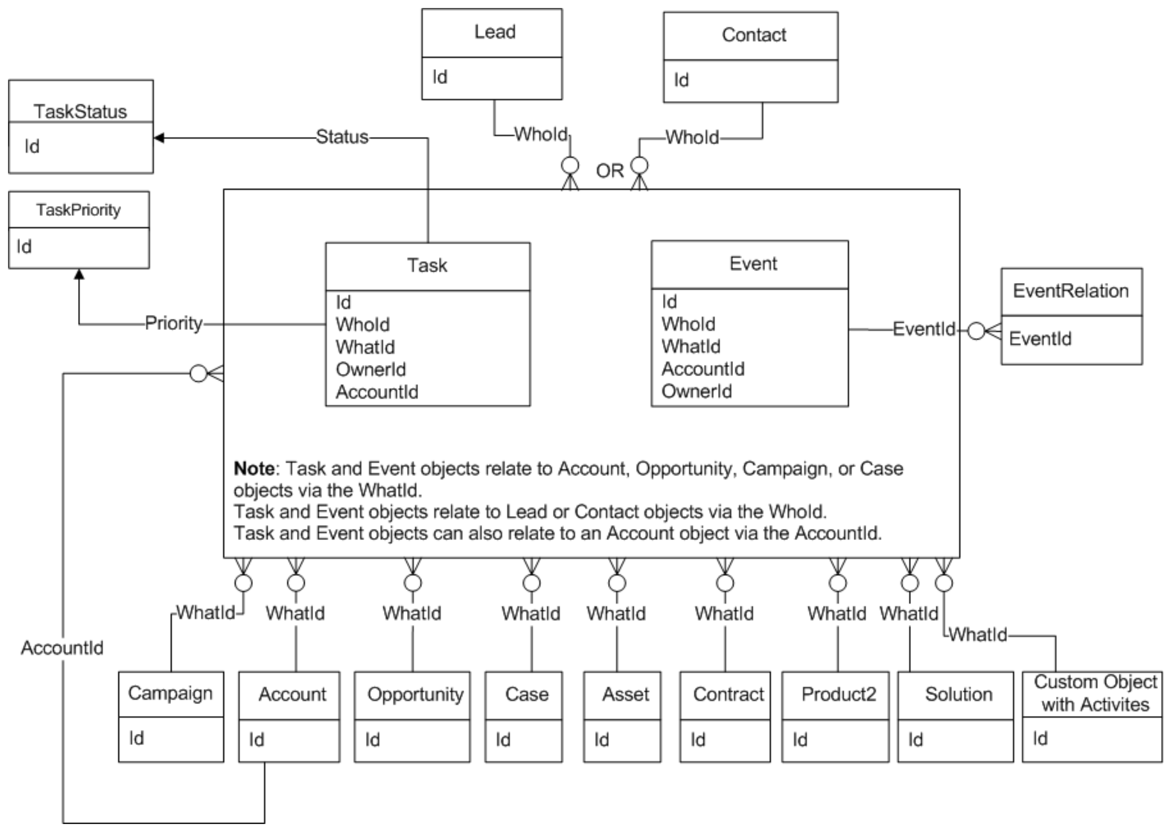


SEE ALSO:

[Standard Objects]

[Data Model]

Task and Event Objects

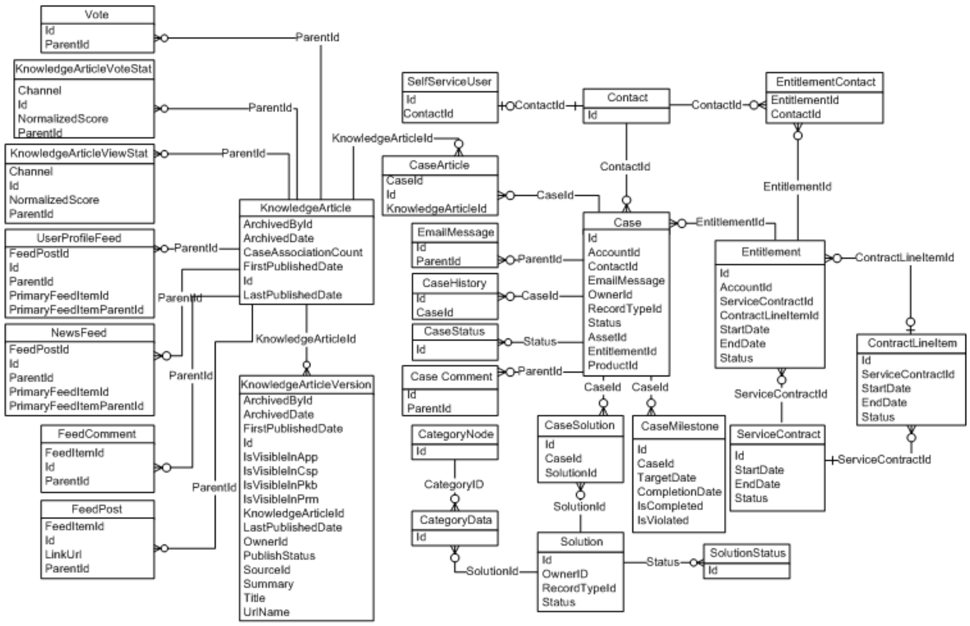


SEE ALSO:

Standard Objects

Data Model

Support Objects

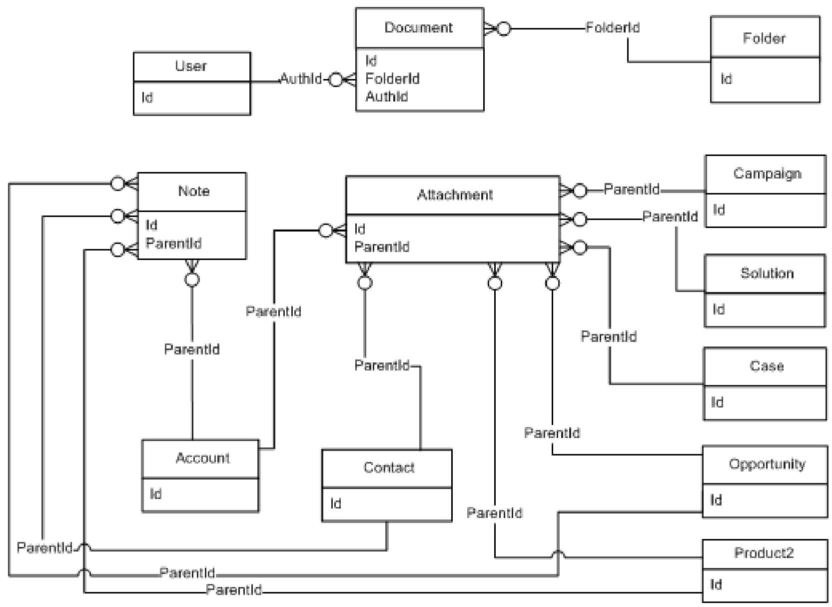


SEE ALSO:

[Standard Objects]

[Data Model]

Document, Note, and Attachment Objects

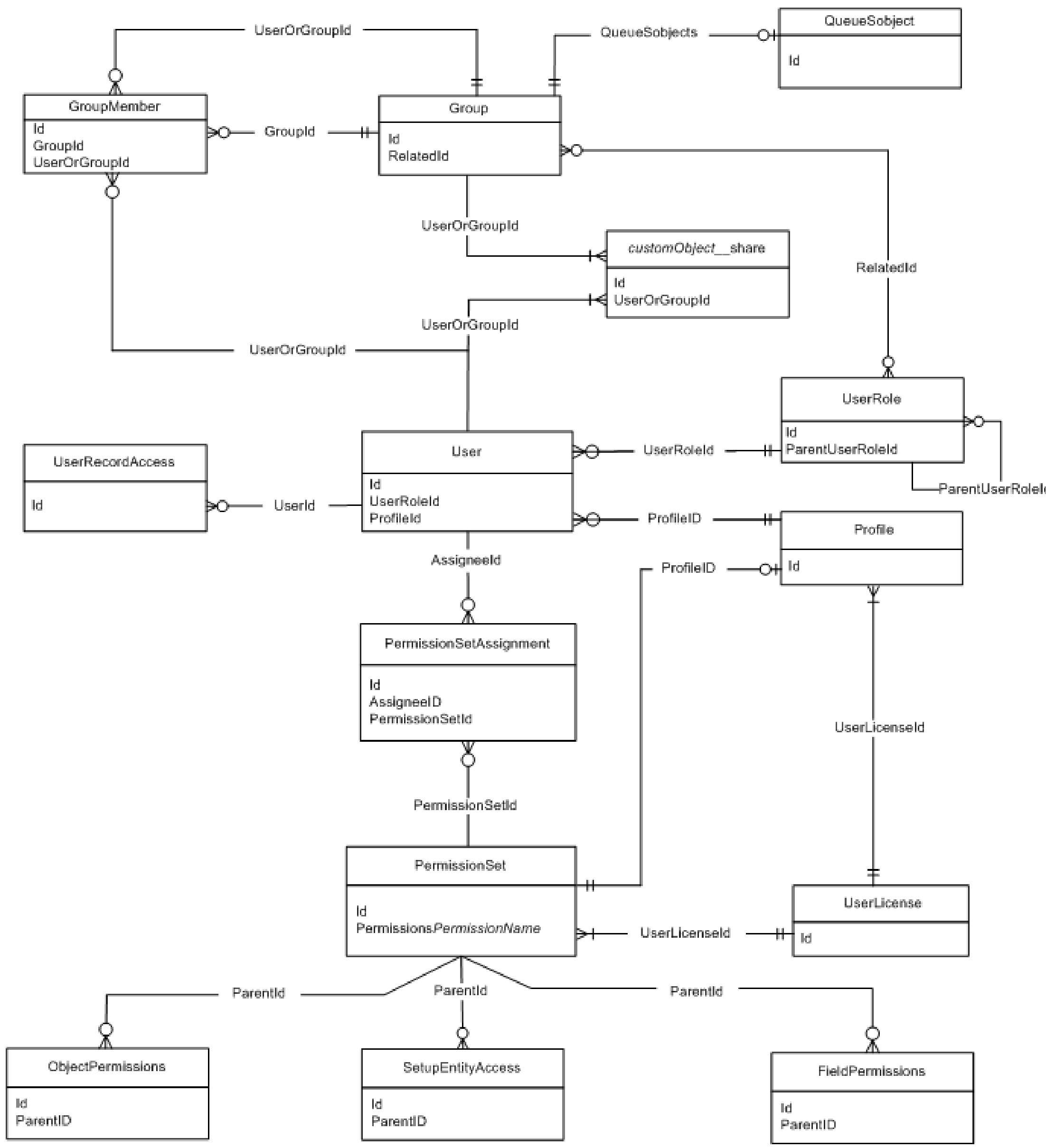


SEE ALSO:

[Standard Objects]()

[Data Model]()

User, Sharing, and Permission Objects



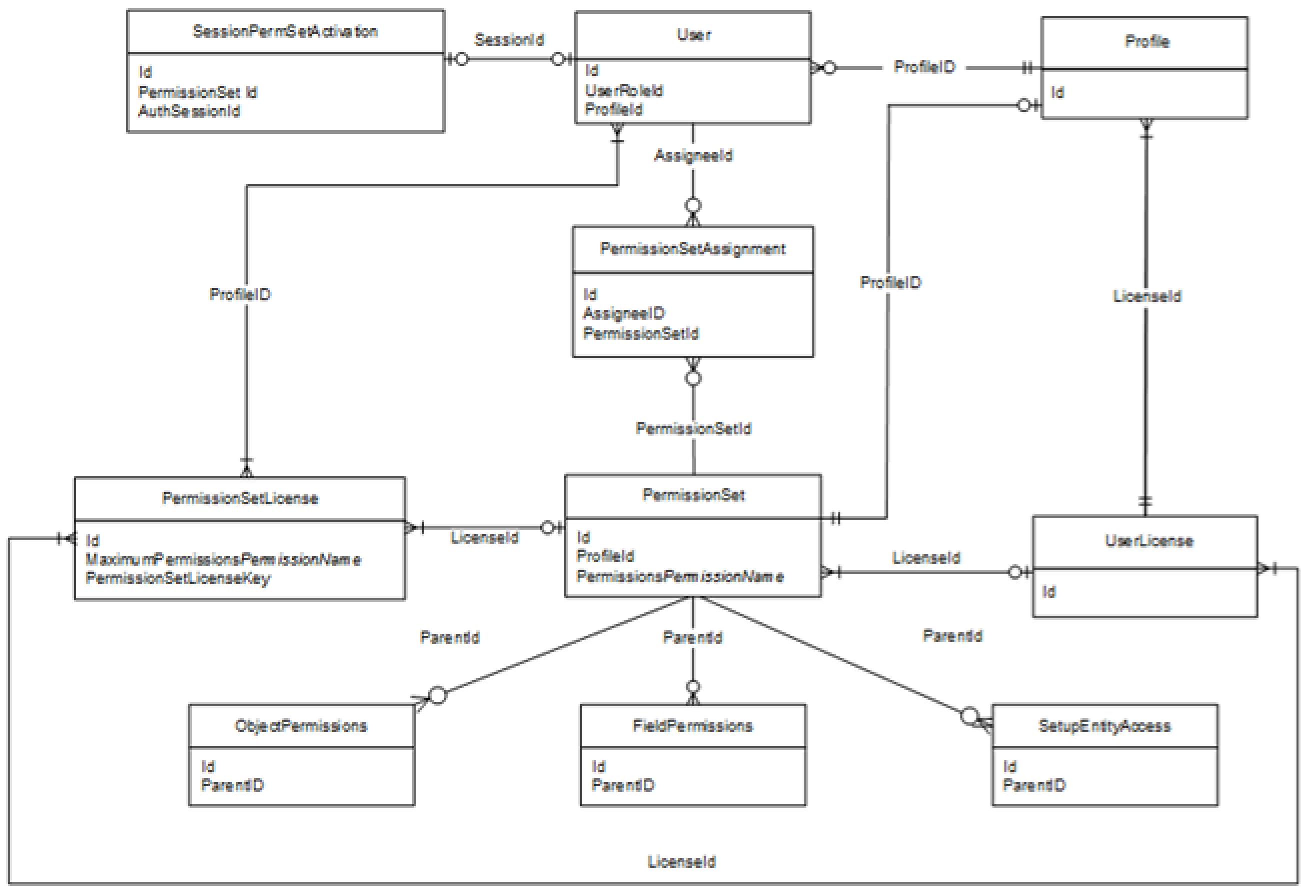
SEE ALSO:

[Standard Objects]

[Data Model]

[Profile and Permission Objects]

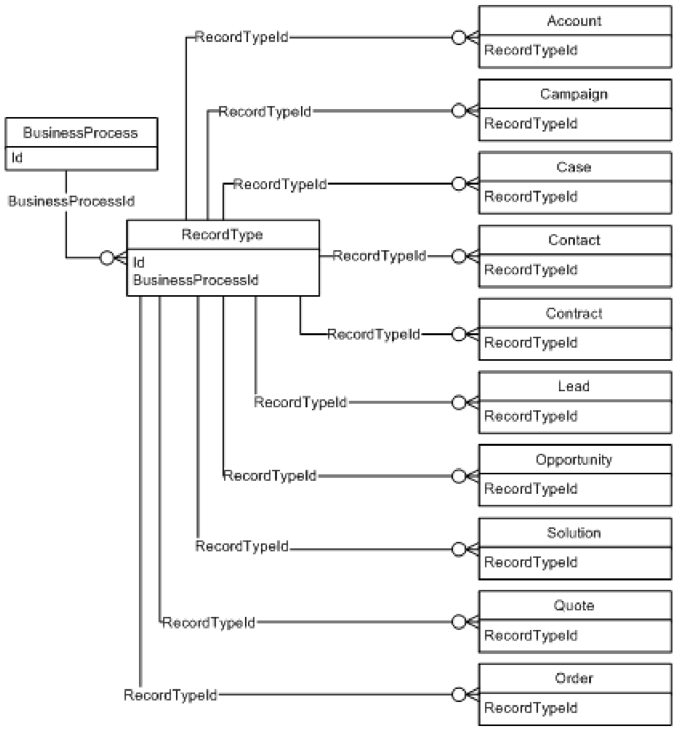
Profile and Permission Objects



SEE ALSO:

- Standard Objects
- Data Model

Record Type Objects

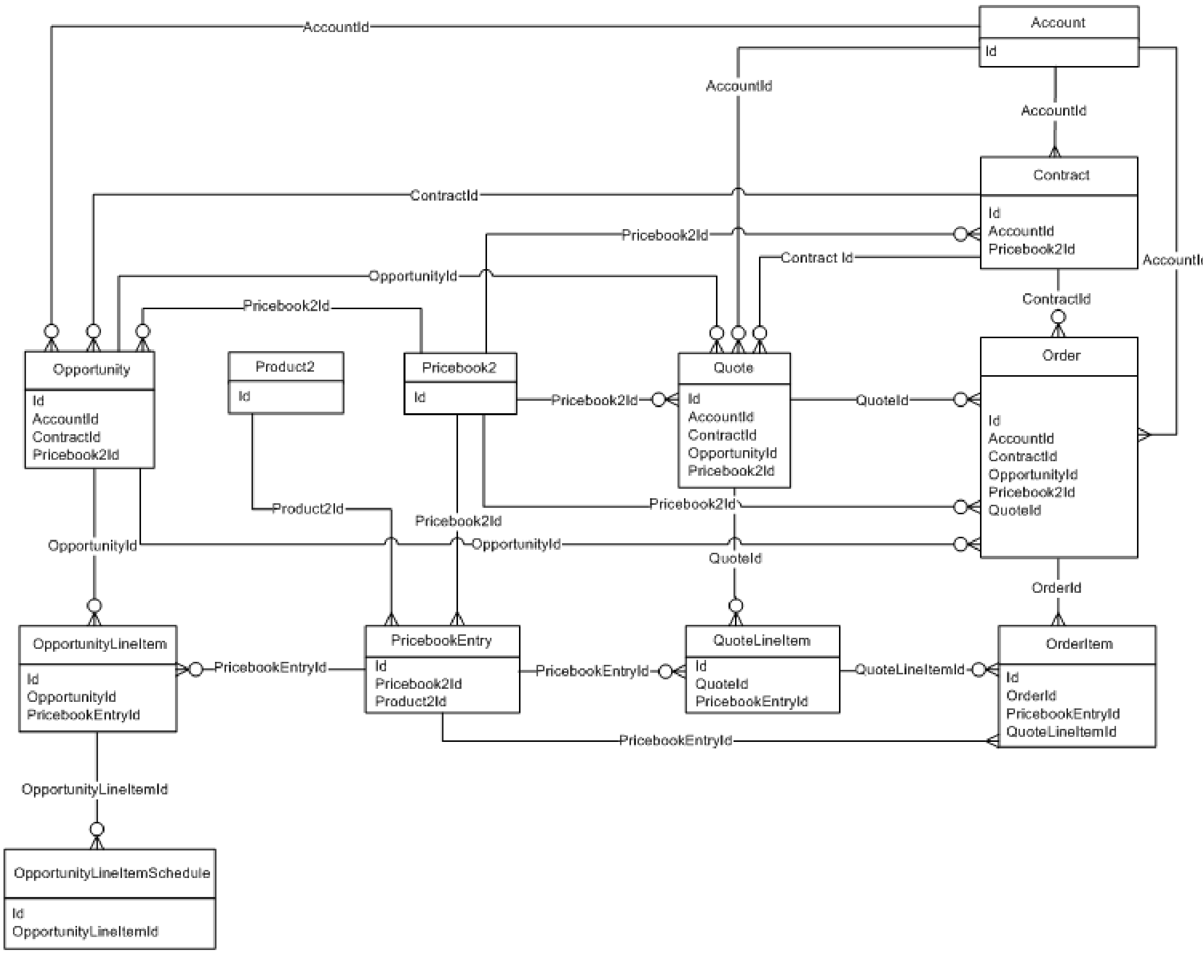


SEE ALSO:

Standard Objects

Data Model

Product and Schedule Objects



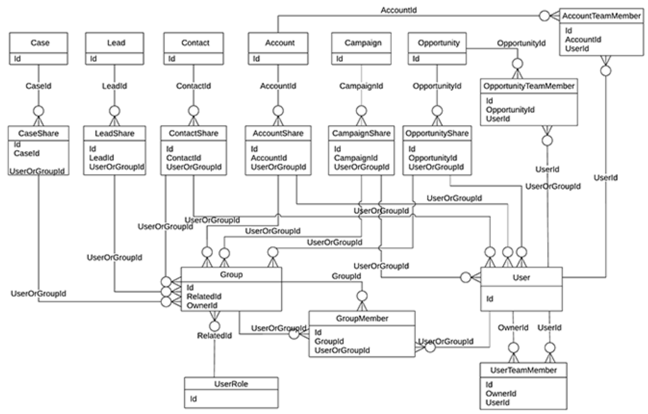
Create a separate PricebookEntry for each currency and price combination.

SEE ALSO:

[Standard Objects](#)

[Data Model](#)

Sharing and Team Selling Objects

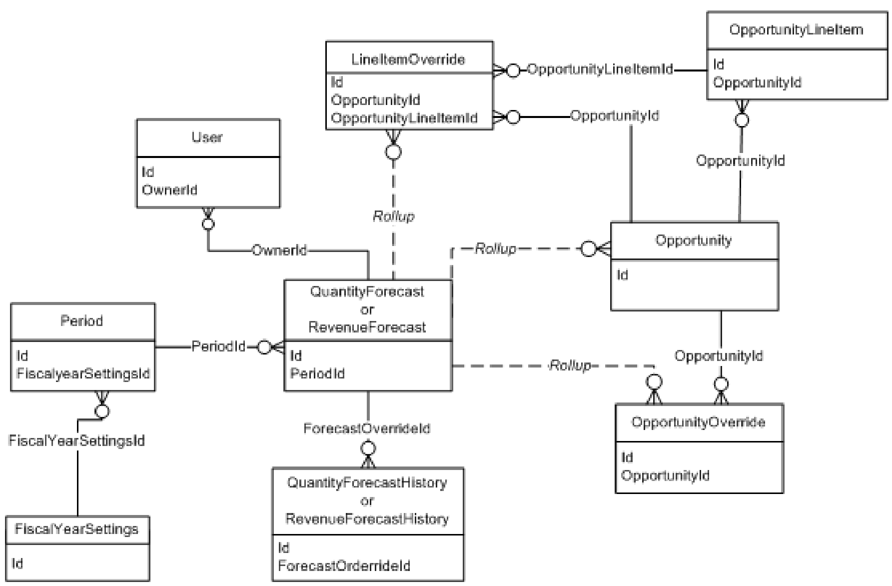


SEE ALSO:

[Standard Objects]

[Data Model]

Customizable Forecasting Objects



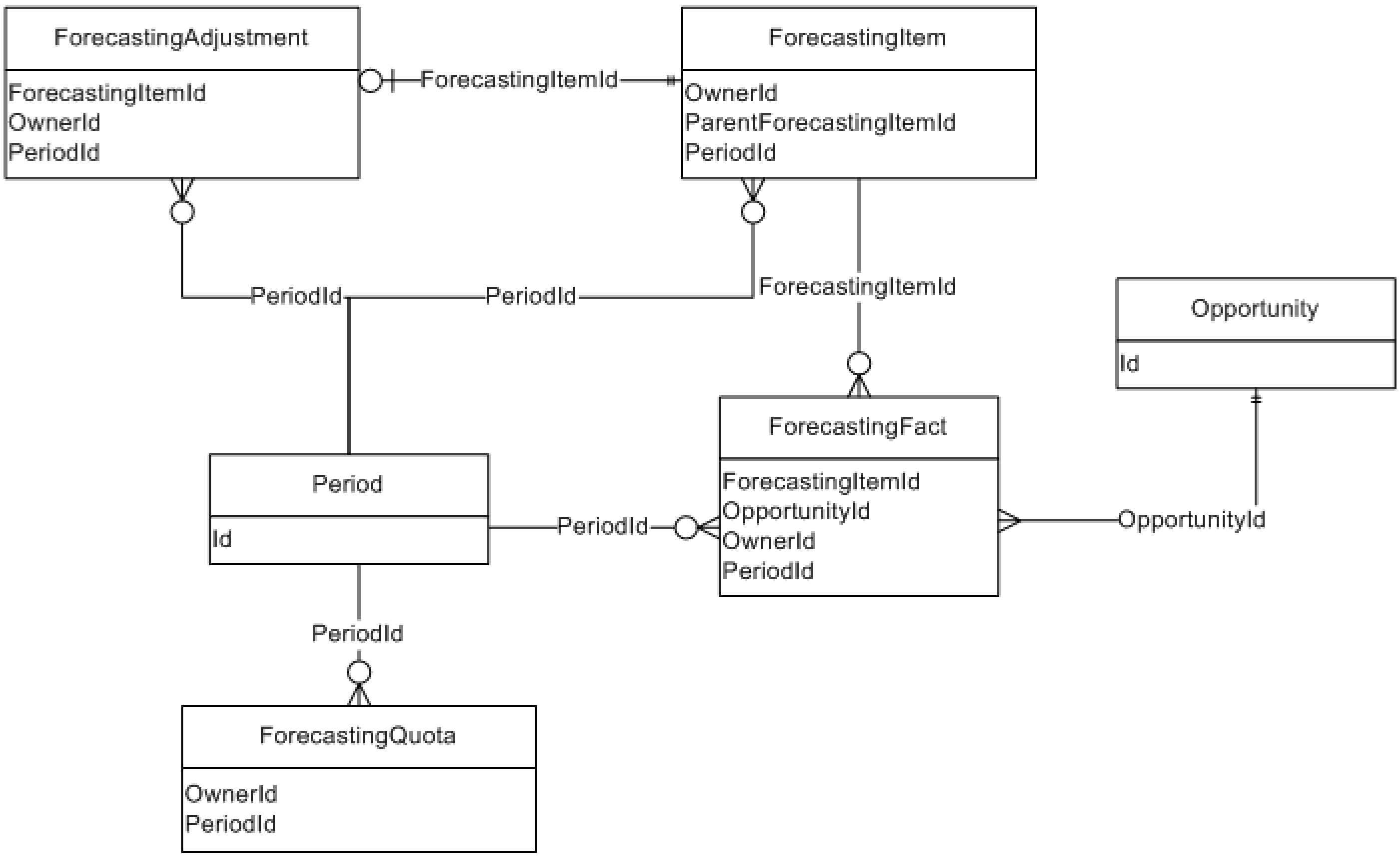
SEE ALSO:

[Standard Objects]

[Data Model]

Forecasts Objects

Note: This information only applies to Collaborative Forecasts.



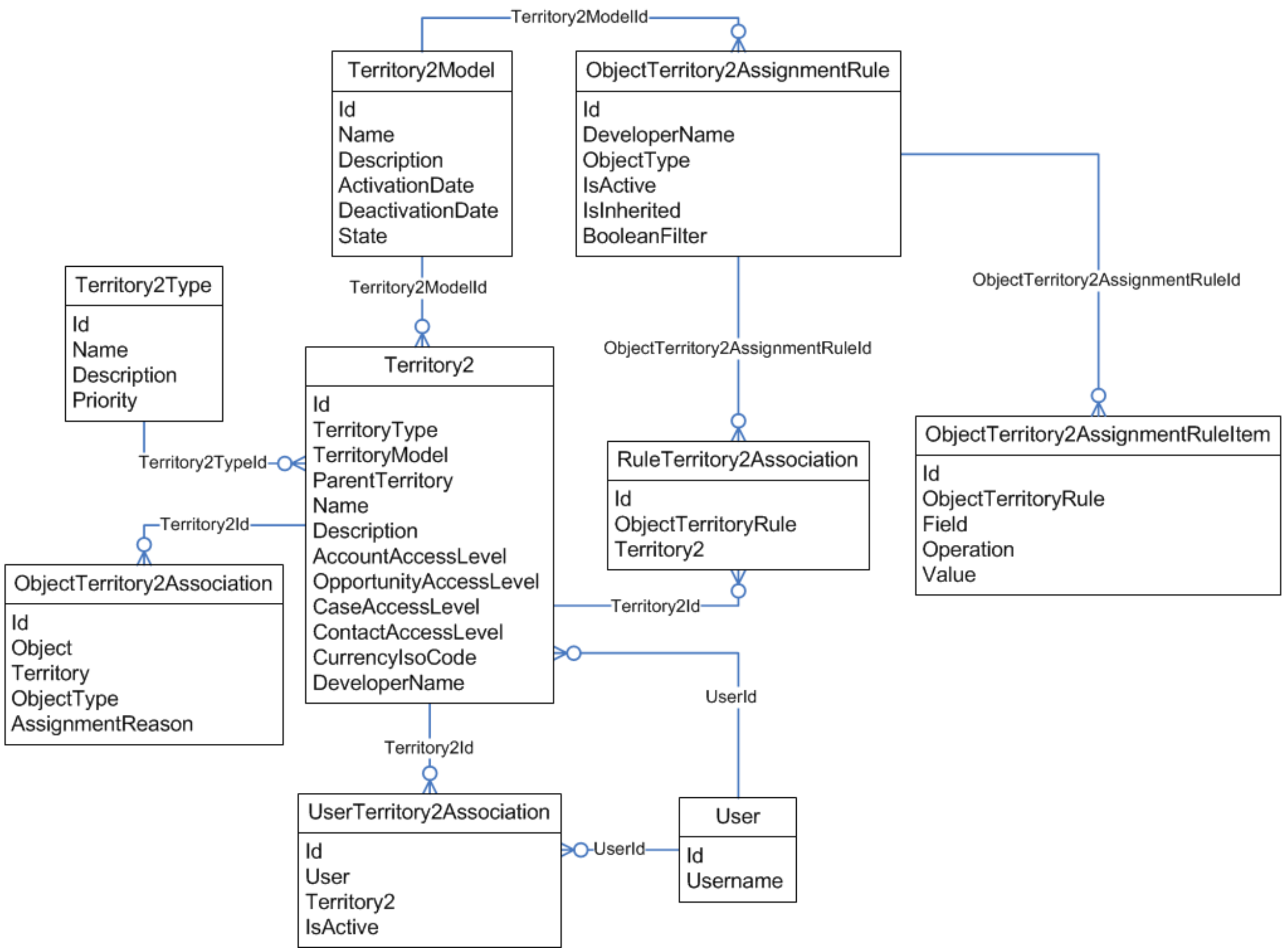
SEE ALSO:

Standard Objects

Data Model

Territory Management 2.0 Objects

Note: This information applies to Territory Management 2.0 only, not to previous versions of Territory Management.

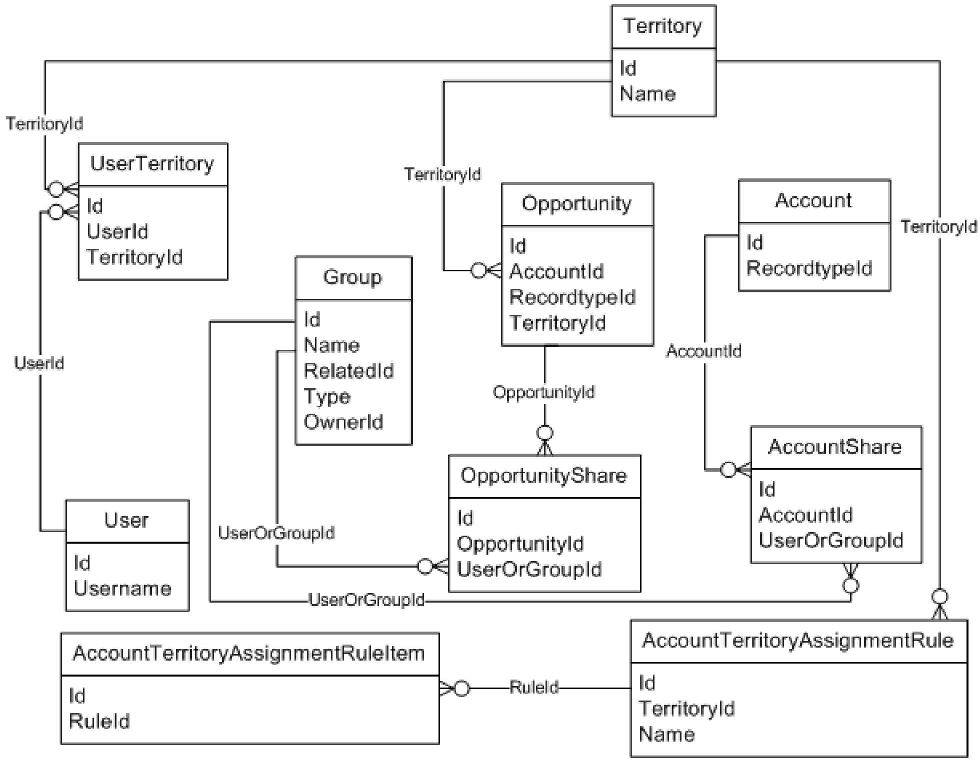


SEE ALSO:

Standard Objects

Data Model

Territory Management

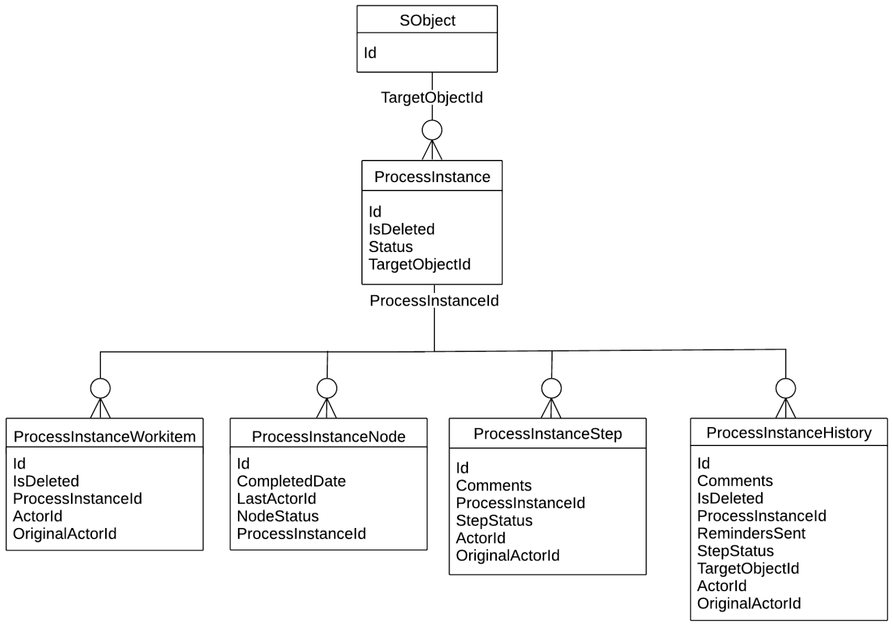


SEE ALSO:

[Standard Objects](#)

[Data Model](#)

Process Objects



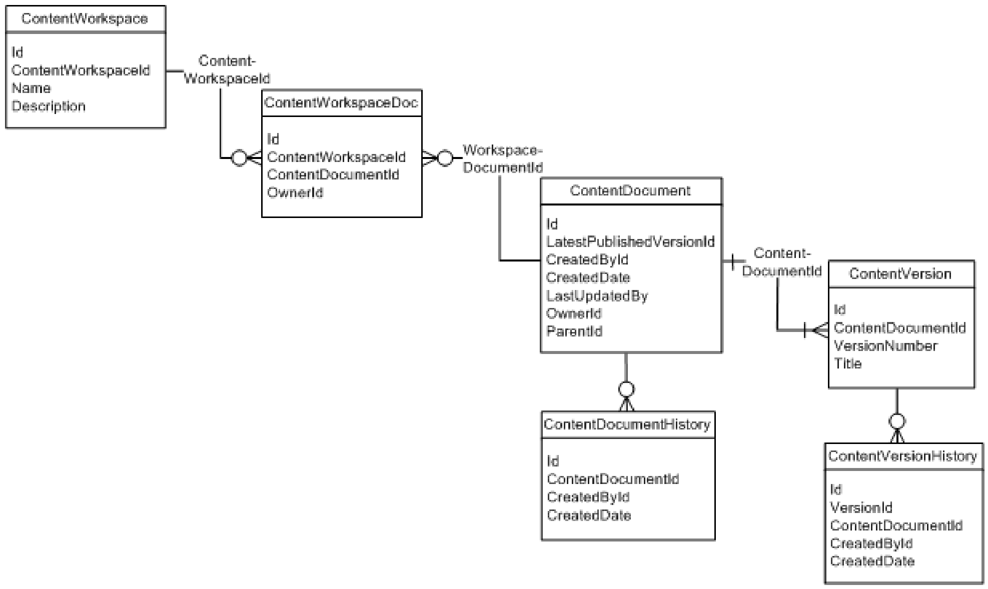
SEE ALSO:

Standard Objects

Data Model

Core Data Types Used in API Calls

Content Objects



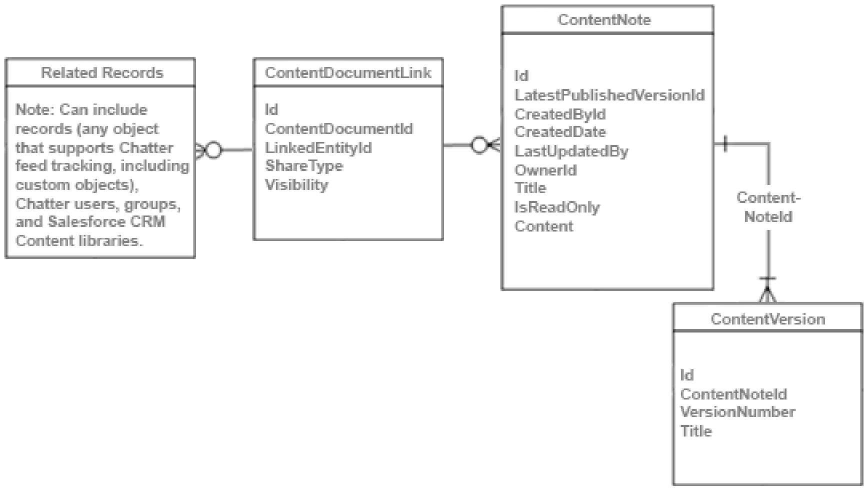
SEE ALSO:

Standard Objects

Data Model

ContentNote Objects

The ContentNote object represents notes created with the enhanced version of the Salesforce note-taking tool.



SEE ALSO:

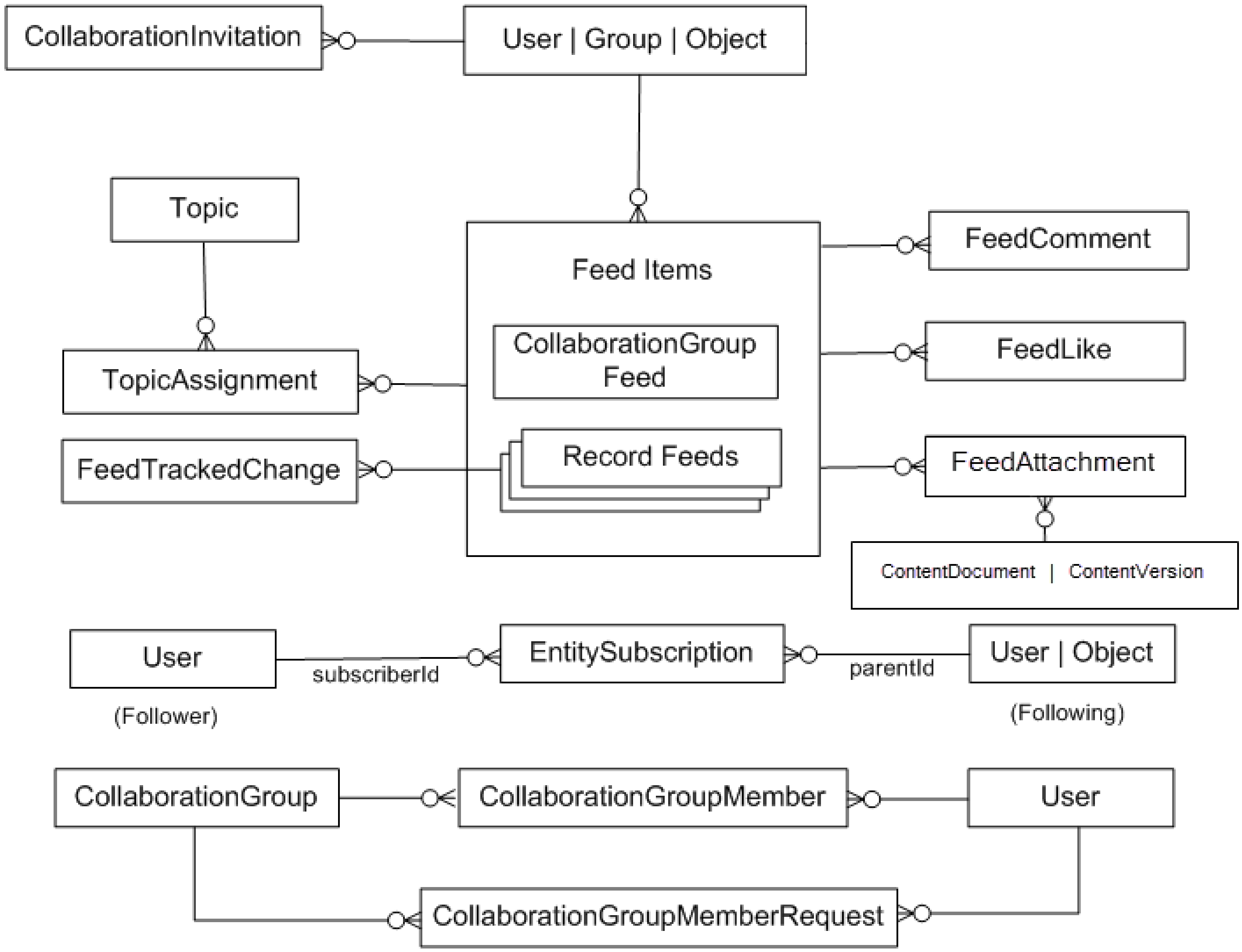
ContentNote

Chatter Objects

Diagram showing the relationships between the Chatter objects

The following diagram shows the relationships between the major Chatter objects.

- A feed item is an entry in the feed, such as a change to a record that's being followed, an updated post, or a user status change.
- All feed items have a `ParentId`, which is either:
  - a record
  - a user
  - a group

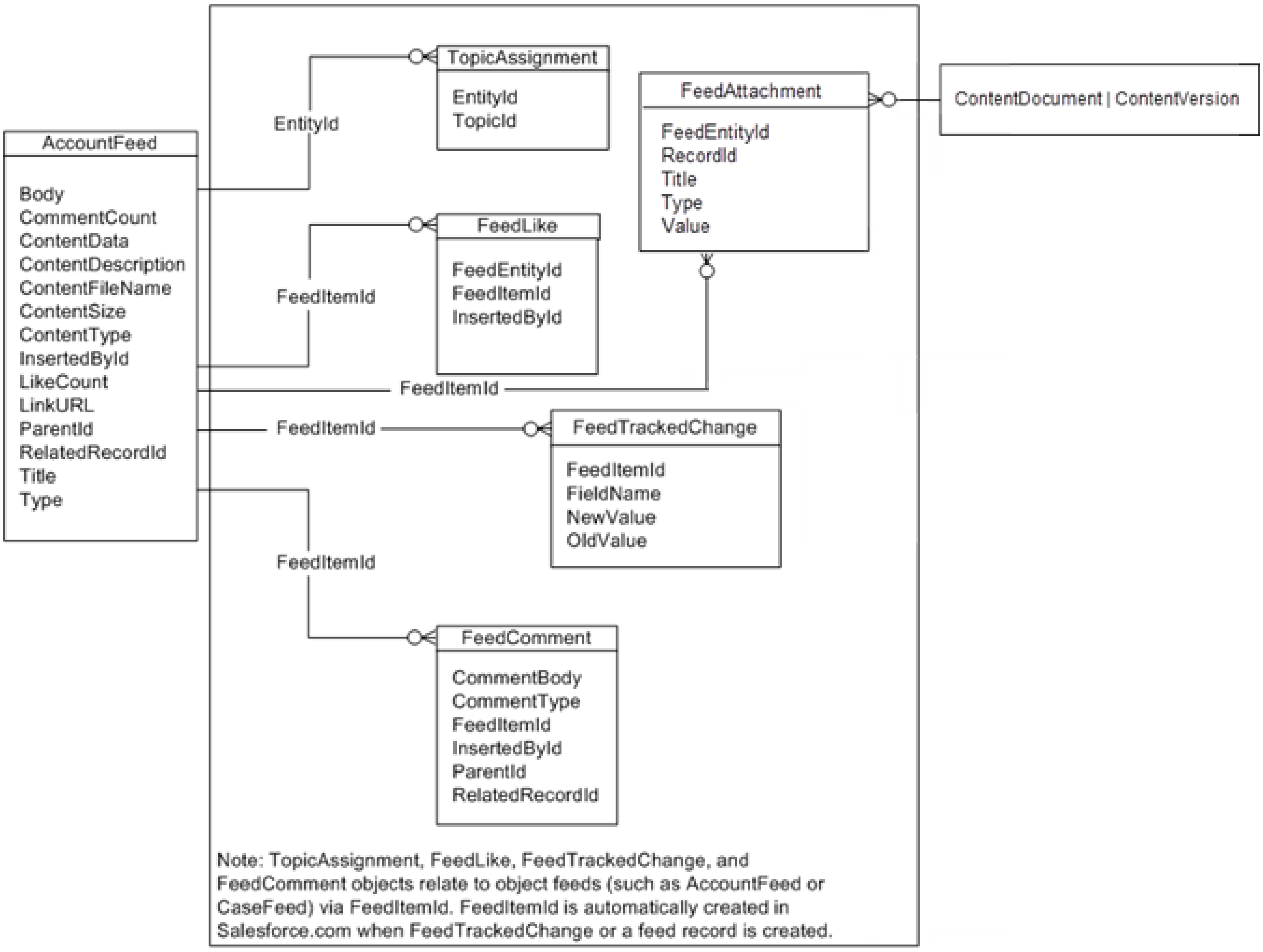


SEE ALSO:

Standard Objects

Data Model

Chatter Feed Objects



Standard Objects with Feeds

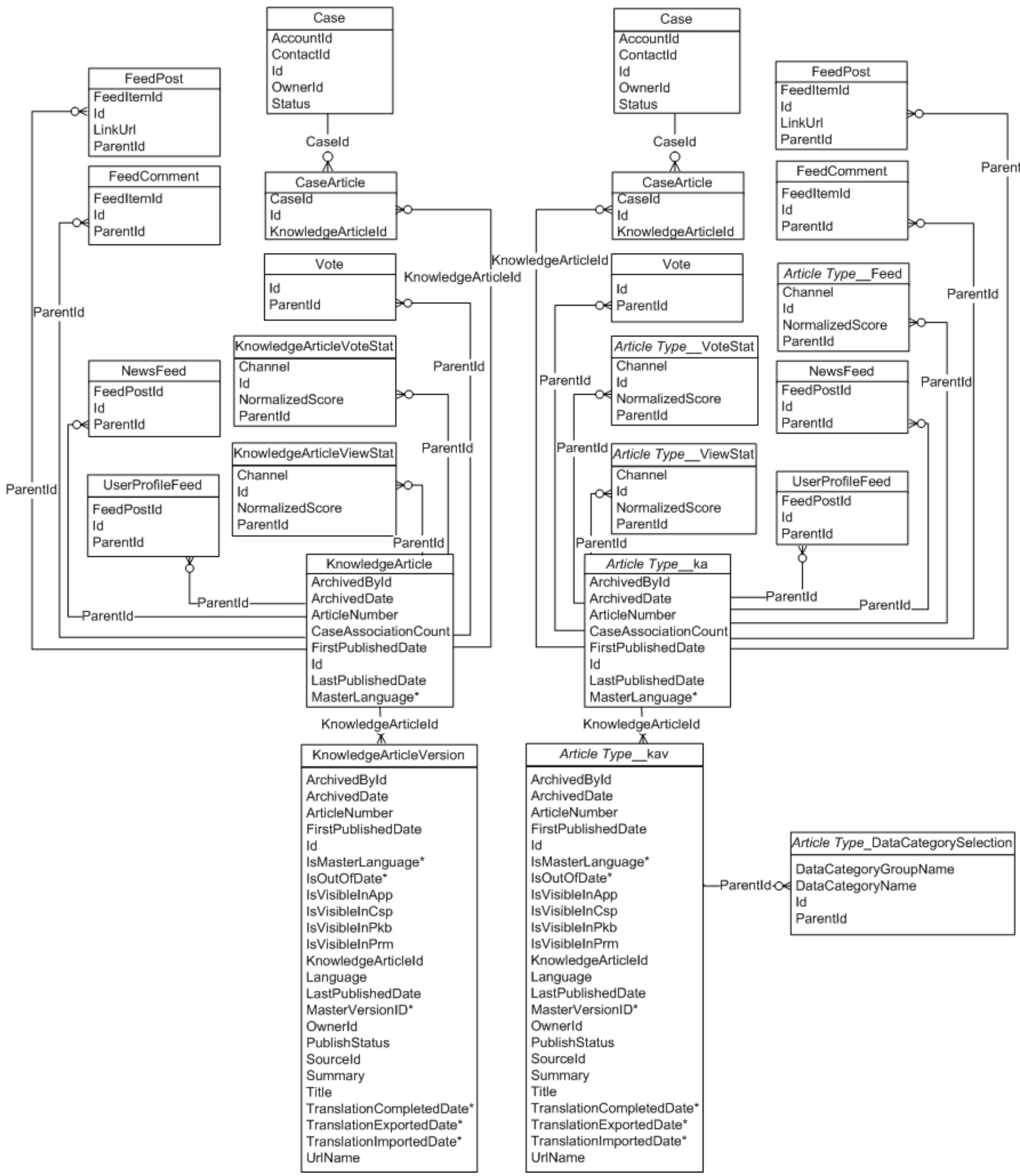
The following standard objects can have Chatter feeds: Account, Asset, Case, CollaborationGroup, Contact, ContentDocument, Contract, Dashboard, DashboardComponent, Entitlement, Event, KnowledgeArticle, Lead, Opportunity, Product2, Quote, Report, ServiceContract, Site, Solution, Task, Topic, User, WorkOrder, and WorkOrderLineItem.

SEE ALSO:

Standard Objects

Data Model

Salesforce Knowledge Objects

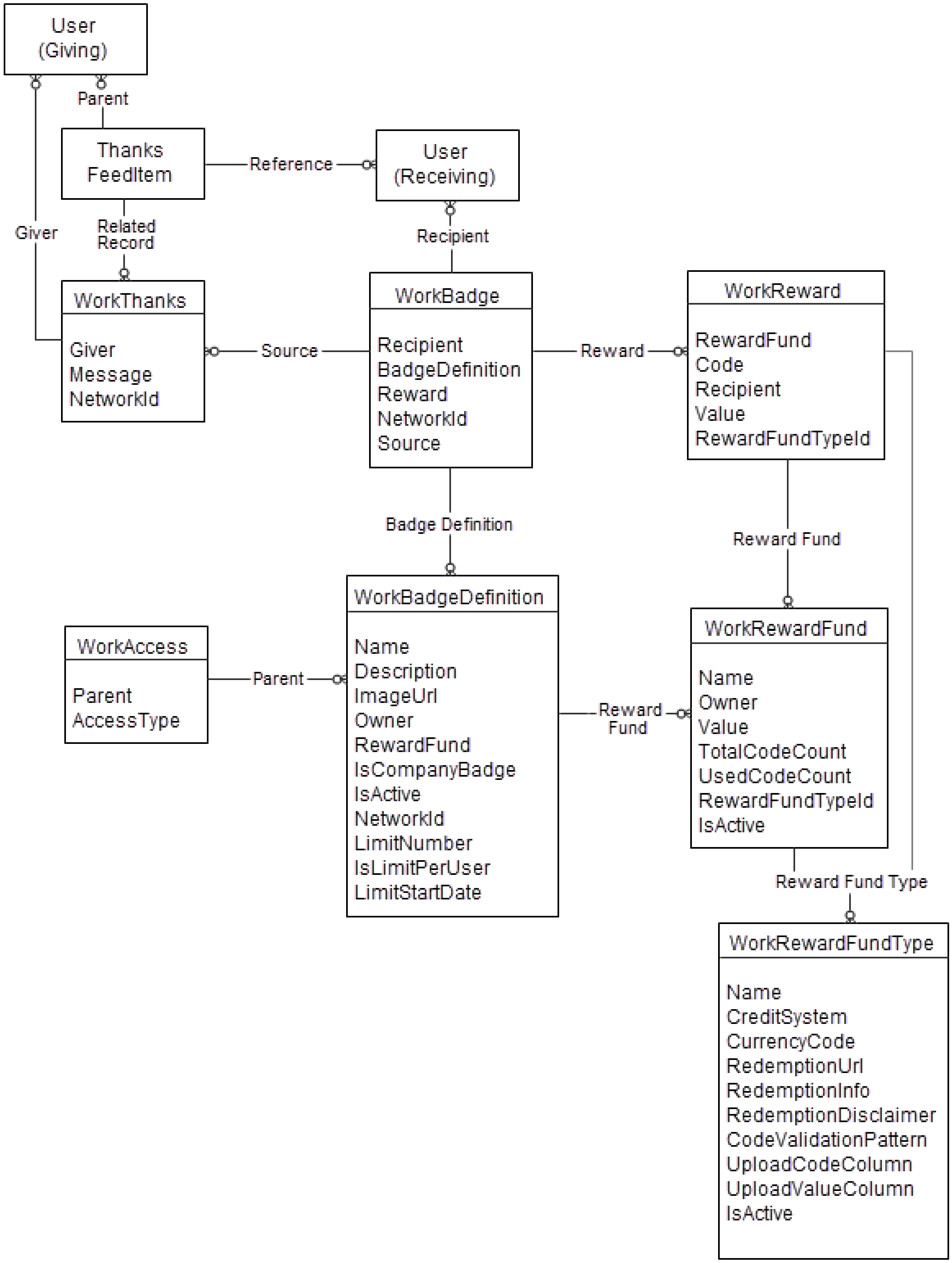


SEE ALSO:

[Standard Objects]

[Data Model]

Work.com Badge and Reward Objects

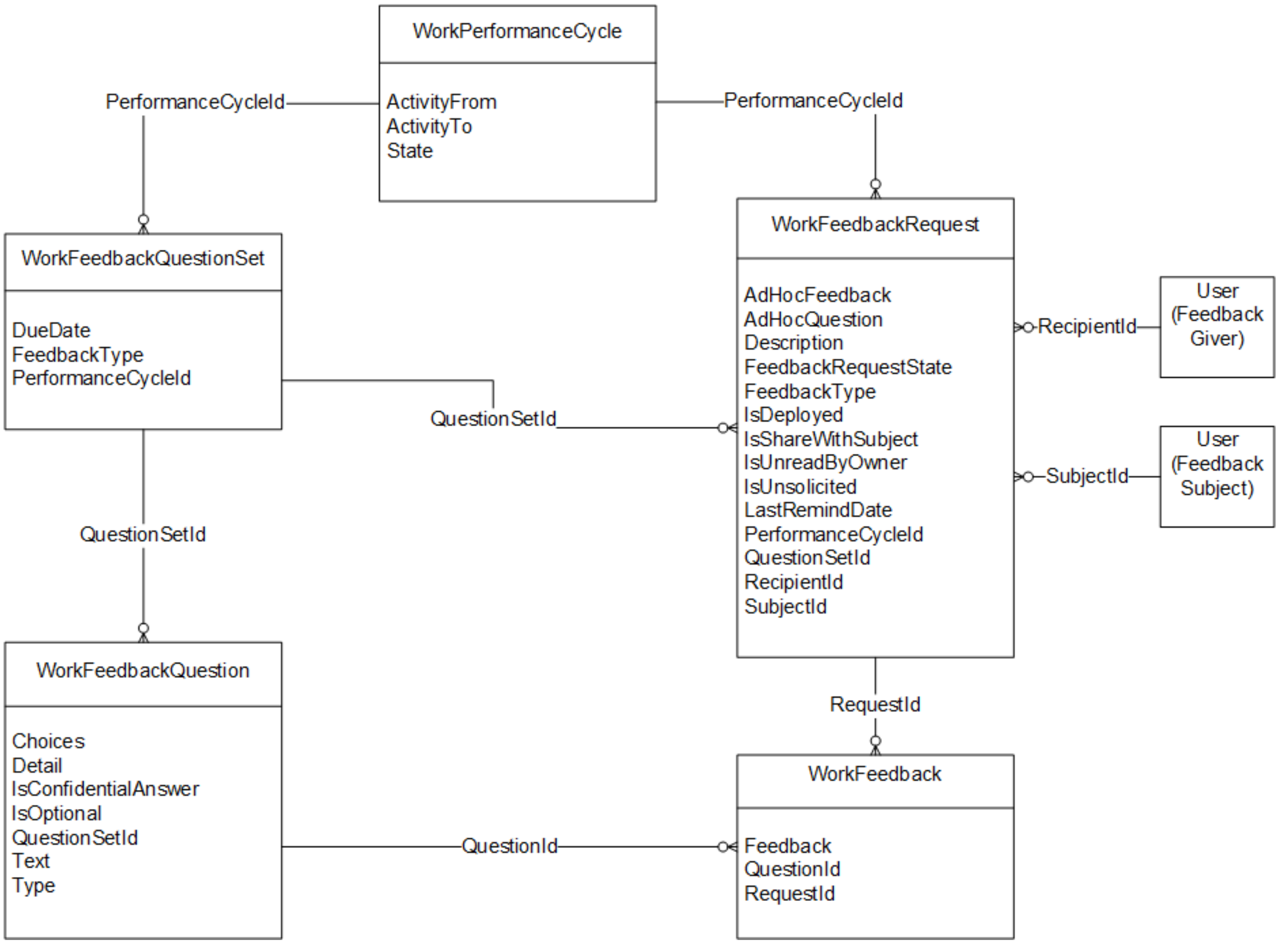


SEE ALSO:

Standard Objects

Data Model

Work.com Feedback and Performance Cycle Objects



SEE ALSO:

Standard Objects

Data Model

CHAPTER 8 Standard Objects

This section provides a list of standard objects and their standard fields. Some fields may not be listed for some objects.

To see the system fields for each object, see System Fields.

To verify the complete list of fields for an object, you can use a describe call from the API, or inspect with an appropriate tool, for example, inspecting the WSDL or using a schema viewer.

AcceptedEventRelation

Represents invitees with the status `Accepted` for a given event.

Account

Represents an individual account, which is an organization or person involved with your business (such as customers, competitors, and partners).

AccountBrand

Represents the brand details of a Partner Account. This object is available in API version 43.0 and later.

AccountBrandShare

Represents a sharing entry on an account brand record. This object is available in API version 43.0 and later.

AccountContactRelation

Represents a relationship between a contact and one or more accounts.

AccountCleanInfo

Stores the metadata Data.com Clean uses to determine an account record's clean status. AccountCleanInfo helps you automate the cleaning or related processing of account records.

AccountContactRole

Represents the role that a Contact plays on an Account.

AccountFeed

Represents a single feed item on an account record detail page. This object is available in API version 18.0 and later.

AccountHistory

Represents the history of changes to the values in the fields of an account. This object is available in versions 11.0 and later.

AccountOwnerSharingRule

Represents the rules for sharing an account with a User other than the owner.

AccountPartner

This read-only object represents a partner relationship between two Account objects. It is automatically created when a Partner object is created for a partner relationship between two accounts.

AccountShare

Represents a sharing entry on an Account.

AccountTag

Associates a word or short phrase with an Account.

AccountTeamMember

Represents a User who is a member of an Account team.

AccountTerritoryAssignmentRule

An account assignment rule that assigns accounts to territories based on account fields. Only available if territory management has been enabled for your organization.

AccountTerritoryAssignmentRuleItem

A row of selection criteria for an AccountTerritoryAssignmentRule object. Only available if territory management has been enabled for your organization.

AccountTerritorySharingRule

Represents the rules for sharing an Account within a Territory.

ActionLinkGroupTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking on an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. Every action link belongs to an action link group and action links within the group are mutually exclusive. This object is available in API version 33.0 and later.

ActionLinkTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. This object is available in API version 33.0 and later.

ActiveScratchOrg

Represents an active scratch org. This object is available in API version 41.0 and later.

ActivityHistory

This read-only object is displayed in a related list of closed activities—past events and closed tasks—related to an object. It includes activities for all contacts related to the object. ActivityHistory fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

AdditionalNumber

Represents an optional additional number for a call center. This additional number is visible in the call center's phone directory.

Address

Represents a mailing, billing, or home address.

AgentWork

Represents a work assignment that's been routed to an agent. This object is available in API version 32.0 and later.

AllowedEmailDomain

Represents an allowed email domain for users in your organization. You can define a whitelist to restrict the email domains allowed in a user's `Email` field. This object is available in API version 29.0 and later.

Announcement

Represents a Chatter group announcement. This object is available in API version 30.0 and later.

ApexClass

Represents an Apex class.

ApexComponent

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`.

ApexLog

Represents a debug log containing information about a transaction, including information about Apex, Visualforce, and workflow and validation rules. This object is available in API version 19.0 and later.

ApexPage

Represents a single Visualforce page.

ApexTestQueueItem

Represents a single Apex class in the Apex job queue. This object is available in API version 23.0 and later.

ApexTestResult

Represents the result of an Apex test method execution. This object is available in API version 23.0 and later.

ApexTestResultLimits

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each ApexTestResult record. This object is available in API version 37.0 and later.

ApexTestRunResult

Contains summary information about all the test methods that were run in a particular Apex job. This object is available in API version 37.0 and later.

ApexTestSuite

Represents a suite of Apex classes to include in a test run. A TestSuiteMembership object associates each class with the suite. This object is available in API version 36.0 and later.

ApexTrigger

Represents an Apex trigger.

AppDefinition

Represents the metadata of an app and its navigation items. Metadata is returned only for apps that the current user can access. This object is available in API version 43.0 and later.

AppExtension

Represents a connection between the Field Service Lightning mobile app and another app, typically for passing record data to the Salesforce app or other apps. This object is available in API version 41.0 and later.

AppMenuItem

Represents the organization's default settings for items in the app menu or App Launcher.

Approval

Represents an approval request for a Contract.

AppTabMember

Represents the list of tabs for each of the available apps. This object is available in API version 43.0 and later.

Article Type__DataCategorySelection

A data category selection represents a data category that classifies an article. This object is available in API version 19.0 and later.

Article Type__Feed

Represents a single feed item in the feed displayed on the detail page for an article. This object is available in API version 20.0 and later.

Asset

Represents an item of commercial value, such as a product sold by your company or a competitor, that a customer has purchased and installed.

AssetFeed

Represents a single feed item in the feed displayed on the detail page for an asset record.

AssetOwnerSharingRule

Represents the rules for sharing an Asset with users other than the owner. This object is available in API version 33.0 and later.

AssetRelationship

Represents a non-hierarchical relationship between assets due to replacement, upgrade, or other circumstances.

AssetShare

Represents a sharing entry on an Asset. This object is available in API version 33.0 and later.

AssetTag

Associates a word or short phrase with an Asset.

AssetTokenEvent

Represents an event associated with an asset token, such as token issuance and registration of a connected device as an Asset. This object is available in API version 39.0 and later.

AssignedResource

Represents a service resource who is assigned to a service appointment. Assigned resources appear in the Assigned Resources related list on service appointments. This object is available in API version 38.0 and later.

AssignmentRule

Represents an assignment rule associated with a Case or Lead.

AssociatedLocation

Represents a link between an account and a location in Field Service Lightning. You can associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.

AsyncApexJob

Represents an individual Apex sharing recalculation job, a batch Apex job, a method with the `future` annotation, or a job that implements `Queueable`.

AttachedContentDocument

This read-only object contains all `ContentDocument` objects associated with an object.

AttachedContentNote

This read-only object contains all ContentNote objects associated with an object. This object is available in API version 35.0 and later.

Attachment

Represents a file that a User has uploaded and attached to a parent object.

AuraDefinition

Represents a Lightning definition, such as component markup, a client-side controller, or an event. This object is available in API version 32.0 and later.

AuraDefinitionBundle

Represents a Lightning definition bundle, such as a component or application bundle. A bundle contains a Lightning definition and all its related resources. This object is available in API version 32.0 and later.

AuthConfig

Represents authentication options for a communityor custom domain that was created by using My Domain. This object is available in API version 32.0 and later.

AuthConfigProviders

Represents an authentication provider that's configured in an organization. This object is a child of the AuthConfig object. This object is available in API version 32.0 and later.

AuthProvider

Represents an authentication provider in your org.

AuthSession

The AuthSession object represents an individual user session in your organization. This object is available in versions 29.0 and later.

BackgroundOperation

Represents a background operation in an asynchronous job queue. This object is available in API version 35.0 and later.

BackgroundOperationResult

Stores error messages generated when running Async SOQL queries or importing data into big objects using Bulk API. This is a big object, available in API version 37.0 and later.

Bookmark

Represents a link between opportunities that share common information.

BrandTemplate

Letterhead for HTML EmailTemplate.

BusinessHours

Specifies the business hours of your support organization. Escalation rules are run only during these hours.

BusinessProcess

Represents a business process.

CallCenter

Represents a call center, which is a logical representation of a single computer-telephony integration (CTI) system instance in an organization.

Campaign

Represents and tracks a marketing campaign, such as a direct mail promotion, webinar, or trade show.

CampaignFeed

Represents a single feed item in the feed on a campaign record detail page. This object is available in API version 18.0 and later.

CampaignHistory

Represents the history of changes to the values in the fields of a campaign. This object is available in versions 40.0 and later.

CampaignInfluence

Represents the association between a campaign and an opportunity in Customizable Campaign Influence. This object is available in API version 37.0 and later.

CampaignInfluenceModel

This read-only object represents a campaign influence model in Customizable Campaign Influence. Use campaign influence models to group `CampaignInfluence` records created by a specific set of triggers and workflows that you define. The Primary Campaign Source influence model is the default model. This object is available in API version 37.0 and later.

CampaignMember

Represents the association between a campaign and either a lead or a contact.

CampaignMemberStatus

One or more member status values defined for a campaign.

CampaignOwnerSharingRule

Represents the rules for sharing a campaign with User records other than the owner or anyone above the owner in the role hierarchy.

CampaignShare

Represents a sharing entry on a Campaign.

CampaignTag

Associates a word or short phrase with a Campaign.

Case

Represents a case, which is a customer issue or problem.

CaseArticle

Represents the association between a Case and a KnowledgeArticle. This object is available in API version 20.0 and later.

CaseComment

Represents a comment that provides additional information about the associated Case.

CaseContactRole

Represents the role that a given Contact plays on a Case.

CaseFeed

Represents a single feed item in the feed displayed on the detail page for a case record. A case feed shows recent changes to a case record for any fields that are tracked in feeds, and comments and posts about the record. It is a useful way to stay up-to-date with changes to cases. This object is available in API version 18.0 and later.

CaseHistory

Represents historical information about changes that have been made to the associated Case.

CaseMilestone

Represents a milestone (required step in a customer support process) on a Case. This object is available in API version 18.0 and later.

CaseOwnerSharingRule

Represents the rules for sharing a case with users other than the owner.

CaseShare

Represents a sharing entry on a Case.

CaseSolution

Represents the association between a Case and a Solution.

CaseStatus

Represents the status of a Case, such as New, On Hold, or In Process.

CaseTag

Associates a word or short phrase with a Case

CaseTeamMember

Represents a case team member, who works with a team of other users to help resolve a case.

CaseTeamRole

Represents a case team role. Every case team member has a role on a case, such as “Customer Contact” or “Case Manager.”

CaseTeamTemplate

Represents a predefined case team, which is a group of users that helps resolve a case.

CaseTeamTemplateMember

Represents a member on a predefined case team, which is a group of users that helps resolve cases.

CaseTeamTemplateRecord

The CaseTeamTemplateRecord object is a linking object between the Case and CaseTeamTemplate objects. To assign a predefined case team to a case (customer inquiry), create a CaseTeamTemplateRecord record and point the `ParentId` to the case and the `TeamTemplateId` to the predefined case team.

CategoryData

Represents a logical grouping of Solution records.

CategoryNode

Represents a tree of Solution categories.

CategoryNodeLocalization

When the Translation Workbench is enabled for your organization, the CategoryNodeLocalization object provides the translation of the label of a solution category.

ChannelProgram

Represents a channel program that vendors use to market and sell their products through channel partners. This object is available in API version 41.0 and later.

ChannelProgramFeed

Represents a single feed item on a channel program feed. This object is available in API version 41.0 and later.

ChannelProgramHistory

Represents the history of changes to the values in the fields of a channel program object. Access is read-only. This object is available in API version 41.0 and later.

ChannelProgramLevel

Represents a level, based on member experience, in a channel program. This object is available in API version 41.0 and later.

ChannelProgramLevelFeed

Represents a single feed item on a channel program level feed. This object is available in API version 41.0 and later.

ChannelProgramLevelHistory

Represents the history of changes to the values in the fields of a channel program level object. Access is read-only. This object is available in API version 41.0 and later.

ChannelProgramLevelShare

Represents a sharing entry on a channel program level record. This object is available in API version 43.0 and later.

ChannelProgramMember

Represents a partner who is a member of a channel program. This object is available in API version 41.0 and later.

ChannelProgramMemberShare

Represents a sharing entry on a channel program member record. This object is available in API version 43.0 and later.

ChannelProgramOwnerSharingRule

Represents a rule for sharing a channel program object with users other than the owner. This object is available in API version 41.0 and later.

ChannelProgramShare

Represents a sharing entry on a channel program record. This object is available in API version 41.0 and later.

ChatterActivity

ChatterActivity represents the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user. This object is available in API version 23.0 and later.

ChatterAnswersActivity

Represents the reputation of a User in Chatter Answers communities. This object is available in API version 25.0 and later.

ChatterAnswersReputationLevel

Represents a reputation level within a Chatter Answers zone. This object is available in API version 26.0 and later.

ChatterConversation

Represents a private conversation in Chatter, consisting of messages that conversation members have sent or received. This object is available in API version 23.0 and later.

ChatterConversationMember

Represents a member of a private conversation in Chatter. A member has either sent messages to or received messages from other conversation participants. This object is available in API version 23.0 and later.

ChatterMessage

Represents a message sent as part of a private conversation in Chatter. This object is available in API version 23.0 and later.

ClientBrowser

Represents a cookie added to the browser upon login, and also includes information about the browser application where the cookie was inserted. This object is available in version 28.0 and later.

CollaborationGroup

Represents a Chatter group. This object is available in API version 19.0 and later.

CollaborationGroupFeed

Represents a single feed item on a Chatter group feed. A group feed shows posts and comments about the group. This object is available in API version 19.0 and later.

CollaborationGroupMember

Represents a member of a Chatter group. This object is available in API version 19.0 and later.

CollaborationGroupMemberRequest

Represents a request to join a private Chatter group. This object is available in API version 21.0 and later.

CollaborationGroupRecord

Represents the records associated with Chatter groups.

CollaborationInvitation

Represents an invitation to join Chatter, either directly or through a group. This object is available in API version 21.0 and later.

ColorDefinition

Represents the color-related metadata for a custom tab. This object is available in API version 43.0 and later.

CombinedAttachment

This read-only object contains all notes, attachments, Google Docs, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter that are associated with a record.

Community (Zone)

Represents a zone that contains Idea or Question objects.

ConnectedApplication

Represents a connected app and its details; all fields are read-only.

Contact

Represents a contact, which is a person associated with an account.

ContactCleanInfo

Stores the metadata Data.com Clean uses to determine a contact record’s clean status. Helps you automate the cleaning or related processing of contact records. ContactCleanInfo includes a number of bit vector fields.

ContactFeed

Represents a single feed item in the feed on a contact record detail page. This object is available in API version 18.0 and later.

ContactHistory

Represents the history of changes to the values in the fields of a contact. This object is available in versions 11.0 and later.

ContactOwnerSharingRule

Represents the rules for sharing a contact with a User other than the owner.

ContactShare

Represents a list of access levels to a Contact along with an explanation of the access level. For example, if you have access to a record because you own it, the `ContactAccessLevel` is `All` and `RowCause` is Owner.

ContactTag

Associates a word or short phrase with a Contact.

ContentAsset

Represents a Salesforce file that has been converted to an asset file in a custom app in Lightning Experience. Use asset files for org setup and configuration. Asset files can be packaged and referenced by other components. This object is available in API version 38.0 and later.

ContentBody

Represents the body of a file in Salesforce CRM Content or Salesforce Files. This object is available in API version 40.0 and later.

ContentDistribution

Represents information about sharing a document externally. This object is available in API version 32.0 and later.

ContentDistributionView

Represents information about views of a shared document. This read-only object is available in API version 32.0 and later.

ContentDocument

Represents a document that has been uploaded to a library in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content. This object is available in API version 21.0 and later for Salesforce Files.

ContentDocumentFeed

Represents a single feed item associated with ContentDocument. A content document feed shows these content document changes: creating a ContentDocument file and uploading a new ContentDocument. This object is available in versions 20.0 and later.

ContentDocumentHistory

Represents the history of a document. This object is available in versions 17.0 and later.

ContentDocumentLink

Represents the link between a Salesforce CRM Content document or Salesforce file and where it's shared. A file can be shared with other users, groups, records, and Salesforce CRM Content libraries. This object is available in versions 21.0 and later for Salesforce CRM Content documents and Salesforce Files.

ContentDocumentSubscription

Represents a subscription for a user following or commenting on a file in a library. This object is available in API version 42.0 and later.

ContentFolder

Represents a folder in a content library for adding files. This object is available in API version 34.0 and later.

ContentFolderItem

Represents a file (ContentDocument) or folder (ContentFolder) that resides in a ContentFolder in a ContentWorkspace. This object is available in API version 35.0 and later.

ContentFolderLink

Defines the association between a library and its root folder. This object is available in API version 34.0 and later.

ContentFolderMember

Defines the association between a file and a folder. This object is available in API version 34.0 and later.

ContentHubItem

Represents a file or folder in a Files Connect external data source, such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

ContentHubRepository

Represents a Files Connect external data source such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

ContentNote

Represents a note created with the enhanced note taking tool, released in Winter '16. This object is available in API version 32.0 and later.

ContentNotification

Represents a notification for a file. This object is available in API version 42.0 and later.

ContentTagSubscription

Represents a subscription for a user following a tag on a file. This object is available in API version 42.0 and later.

ContentUserSubscription

Represents a subscription for a user following another user. This object is available in API version 42.0 and later.

ContentVersion

Represents a specific version of a document in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content documents. This object is available in versions 20.0 and later for Salesforce Files.

ContentVersionComment

Represents a comment on a version of a file. This object is available in API version 42.0 and later.

ContentVersionHistory

Represents the history of a specific version of a document. This object is available in version 17.0 and later.

ContentVersionRating

Represents a rating on a version of a file. This object is available in API version 42.0 and later.

ContentWorkspace

Represents a content library. This object is available in versions 17.0 and later.

ContentWorkspaceDoc

Represents a link between a document and a public library in Salesforce CRM Content. This object is available in versions 17.0 and later.

ContentWorkspaceMember

Represents a member of a content library. This object is available in API version 40.0 and later.

ContentWorkspacePermission

Represents a library permission. This object is available in API version 40.0 and later.

ContentWorkspaceSubscription

Represents a subscription for a user following a library. This object is available in API version 42.0 and later.

Contract

Represents a contract (a business agreement) associated with an Account.

ContractContactRole

Represents the role that a given Contact plays on a Contract.

ContractFeed

Represents a single feed item in the feed on the contract record detail page. This object is available in API version 18.0 and later.

ContractHistory

Represents the history of changes to the values in the fields of a contract.

ContractLineItem

Represents a product covered by a service contract (customer support agreement). This object is available in API version 18.0 and later.

ContractLineItemHistory

Represents the history of changes to the values in the fields on a ContractLineItem (items in a customer support agreement). This object is available in API version 18.0 and later.

ContractStatus

Represents the status of a Contract, such as Draft, InApproval, Activated, Terminated, or Expired.

ContractTag

Associates a word or short phrase with a Contract.

CorsWhitelistEntry

Cross-Origin Resource Sharing (CORS) enables web browsers to request resources from origins other than their own (cross-origin). For example, using CORS, JavaScript code at `https://www.example.com` could request a resource from `https://www.salesforce.com`. To access supported Salesforce APIs, Apex REST resources, and Lightning Out from JavaScript code in a web browser, add the origin serving the code to a Salesforce CORS whitelist.

CronJobDetail

Contains details about the associated scheduled job, such as the job's name and type. This object is available in API version 29.0 and later.

CronTrigger

Contains schedule information for a scheduled job. CronTrigger is similar to a cron job on UNIX systems. This object is available in API version 17.0 and later.

CurrencyType

Represents the currencies used by an organization for which the multicurrency feature is enabled.

CustomBrand

Represents a custom branding and color scheme. This object is available in API version 28.0 and later.

CustomBrandAsset

Represents a branding element in a custom branding scheme. For example, a color, logo image, header image, or footer text. A CustomBrandAsset can apply to a community or to an org using the Salesforce app. This object is available in API version 28.0 and later.

CustomHttpHeader

Represents a custom HTTP header that provides context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 43.0 and later.

Custom Metadata Type__mdt

Represents a custom metadata record. This object is available in API version 34.0 and later.

Custom Object__Feed

`Custom Object`__Feed is the base object for all record feed objects. For example, AccountFeed is based on `Custom Object`__Feed. The `Custom Object`__Feed object is not, in itself, accessible. Objects based on the `Custom Object`__Feed object are available in API version 18.0 and later.

CustomPermission

Represents a permission created to control access to a custom process or app, such as sending email. This object is available in API version 31.0 and later.

CustomPermissionDependency

Represents the dependency between two custom permissions when one custom permission requires that you enable another custom permission. This object is available in API version 32.0 and later.

DandBCompany

Represents a Dun & Bradstreet® company record, which is associated with an account added from Data.com. This object is available in API version 25.0 and later.

Dashboard

Represents a dashboard, which shows data from custom reports as visual components. Access is read-only. This object is available in API version 20.0 and later.

DashboardComponent

Represents a dashboard component, which can be a chart, metric, table, or gauge on a dashboard. Access is read-only. This object is available in API version 21.0 and later.

DashboardComponentFeed

Represents a single feed item in the feed displayed on a dashboard component. This object is available in API version 21.0 and later.

DashboardFeed

Represents a single feed item in the feed displayed on a dashboard. This object is available in API version 20.0 and later.

DashboardTag

Associates a word or short phrase with a Dashboard. This object is available in API version 20.0 and later.

DataAssessmentFieldMetric

Represents summary statistics for matched, blank, and differing fields in account records of an org compared to records in Data.com.This object is available in API version 37.0 and later.

DataAssessmentMetric

Represents a summary of statistics for fields matched and unmatched in your account records with Data.com account records.This object is available in API version 37.0 and later.

DataAssessmentValueMetric

Summarizes the number of fields matched for your account records with Data.com account records.This object is available in API version 37.0 and later.

DatacloudCompany

Represents the fields for Data.com company records. This object is available in API version 30.0 or later.

DatacloudContact

The fields and properties for Data.com contact records. This object is available in API version 30.0 or later.

DatacloudDandBCompany

Represents a set of read-only fields that are used to return D&B company data from Data.com API calls. This object is available in API version 30.0 or later.

DatacloudOwnedEntity

Represents fields in the DatacloudOwnedEntity object. The DatacloudOwnedEntity object tracks user-purchased records. This object is available in API version 30.0 or later.

DatacloudPurchaseUsage

Represents an object used to identify and track Data.com record purchases. This object is available in API version 30.0 or later.

DatacloudSocialHandle

Returns normalized URLs with userids for different social media used by Data.com contacts. The DatacloudSocialHandle object is a child object of the DatacloudContact object.This object is available in API version 30.0 or later.

DataIntegrationRecordPurchasePermission

Indicates Lightning Data purchase credits that a Salesforce admin has granted to users.

DatedConversionRate

Represents the dated exchange rates used by an organization for which the multicurrency and the effective dated currency features are enabled.

DcSocialProfile

The `DcSocialProfile` object is a read-only object accessible only through the Data.com Social Key API. This object is available in API version 32.0 or later.

DcSocialProfileHandle

The `DcSocialProfileHandle` object. a child object to `DcSocialProfile`, is a read-only object accessible only through the Data.com Social Key API. The `DcSocialProfileHandle` object is a child object of the `DcSocialProfile` object.This object is available in API version 32.0 or later.

DeclinedEventRelation

Represents invitees with the status `Declined` for a given event. This object is available in API versions 29.0 and later.

DigitalSignature

Represents a signature captured on a service report in field service.

Division

A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.

DivisionLocalization

When the Translation Workbench is enabled for your organization, the DivisionLocalization object provides the translation of the label for a division.

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object.

DocumentAttachmentMap

Maps the relationship between an EmailTemplate and its attachment, which is stored as a Document.

DocumentTag

Associates a word or short phrase with a Document.

Domain

Read-only object that represents a custom Web address assigned to a site in your organization. This object is available in API version 26.0 and later.

DomainSite

Read-only junction object that joins together the Site and Domain objects. This object is available in API version 26.0 and later.

DuplicateJob

Represents an instance of a job that identifies duplicates among existing records in the system.

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally.

DuplicateJobMatchingRule

Represents a MatchingRule to be used with a DuplicateJob sharing the corresponding DuplicateJobMatchingRuleDefinition.

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition.

DuplicateRecordItem

Represents an individual record that's part of a duplicate record set. Use this object to create custom report types.

DuplicateRecordSet

Represents a group of records that have been identified as duplicates. Each duplicate record set contains one or more duplicate record items. Use this object to create custom report types and view the results of duplicate jobs.

DuplicateRule

Represents a duplicate rule for detecting duplicate records.

EmailDomainFilter

Represents a filter that determines whether an email relay is restricted to a specific list of domains. This object is available in API version 43.0 and later.

EmailDomainKey

Represents a domain key for an organization's domain, used to authenticate outbound email that Salesforce sends on the organization's behalf. This object is available in API version 28.0 and later.

EmailMessage

Represents an email in Salesforce.

EmailMessageRelation

Represents the relationship between an email and contacts, leads, and users. This object is available in API version 37.0 and later

EmailRelay

Represents the configuration for sending an email relay. An email relay routes email sent from Salesforce through your company's email servers. This object is available in API version 43.0 and later.

EmailServicesAddress

An email service address.

EmailServicesFunction

An email service.

EmailStatus

Represents the status of email sent.

EmailTemplate

Represents a template for mass email, or email sent when the activity history related list of a record is modified.

EmbeddedServiceDetail

Represents a metadata catalog object that exposes fields from the underlying Embedded Service setup objects defined in each EmbeddedServiceConfig deployment for guest users. Guest users don't have direct access to the Embedded Service setup objects. Available in API version 39.0 and later.

Entitlement

Represents the customer support an account or contact is eligible to receive. This object is available in API version 18.0 and later. Entitlements may be based on an asset, product, or service contract.

EntitlementContact

Represents a Contact eligible to receive customer support via an Entitlement. This object is available in API version 18.0 and later.

EntitlementFeed

Represents a single feed item in the feed displayed on the detail page for an entitlement. An entitlement feed shows recent changes to an entitlement record for any fields that are tracked in feeds, and comments and posts about the record. It's a useful way to stay up-to-date with changes to entitlements. This object is available in API version 23.0 and later.

EntitlementHistory

Represents the changes to field values on an Entitlement. This object is available in API version 18.0 and later.

EntitlementTemplate

Represents predefined terms of customer support for a product (Product2). This object is available in API version 18.0 and later.

EntityHistory

Represents historical information about an object's changed field values. This object is only available to users with the "View All Data" permission. This object is unavailable beginning with API version 8.0. Use the object-specific History objects instead: CaseHistory, ContractHistory, LeadHistory, OpportunityFieldHistory, OpportunityHistory ProcessInstanceHistory, QuantityForecastHistory, RevenueForecastHistory, or SolutionHistory.

EntityMilestone

Represents a required step in a customer support process on a work order. The Salesforce user interface uses the term "object milestone." This object is available in API version 37.0 and later.

EntitySubscription

Represents a subscription for a user following a record or another user. This object is available in API version 34.0 and later.

EnvironmentHubMember

Represents a member organization in the Environment Hub. This object is available in API version 29.0 and later.

Event

Represents an event in the calendar. In the user interface, event and task records are collectively referred to as activities.

EventFeed

Represents a single feed item in the feed on an Event. This object is available in API version 20.0 and later.

EventLogFile

Represents event log files for event monitoring. The event monitoring product gathers information about your Salesforce org's operational events, which you can use to analyze usage trends and user behavior. This object is available in API version 32.0 and later. The `Interval` and `Sequence` fields are available only in API version 37.0 and later.

EventRelation

Represents a person (a user, lead, or contact) or a resource (such as a conference room) invited to an event. This object lets you add or remove invitees from an event and use the API to manage invitees' responses to invitations. If Shared Activities is enabled, EventRelation can also represent other objects that are related to an event. EventRelation does not support triggers, workflow, or data validation rules.

EventBusSubscriber

Represents a trigger, process, or flow that is subscribed to a platform event.

EventTag

Associates a word or short phrase with an Event.

EventWhoRelation

Represents the relationship between an event and a lead or contacts. This derived object is a filtered version of the EventRelation on page 1136 object; that is, IsParent is `true` and IsWhat is `false`. It doesn't represent relationships to invitees or to accounts, opportunities, or other objects. This object is available in API versions 29.0 and later.

ExternalDataSource

Represents an external data source, which defines connection details for integration with data and content that are stored outside the Salesforce org. This object is available in API version 27.0 and later.

ExternalDataUserAuth

Stores authentication settings for a Salesforce user to access an external system. The external system must be defined in an external data source or a named credential that's configured to use per-user authentication. This object is available in API version 27.0 and later.

FeedAttachment

Represents an attachment to a feed item, such as a file attachment or a link. Use FeedAttachment to add various attachments to one feed item. This object is available in API version 36.0 and later.

FeedComment

Represents a comment added to a feed by a user. This object is available in API version 18.0 and later.

FeedItem

FeedItem represents an entry in the feed, such as changes in a record feed, including text posts, link posts, and content posts. This object is available in API version 21.0 and later. This object replaces FeedPost.

FeedLike

Indicates that a user has liked a feed item. This object is available in API version 21.0 and later.

FeedPollChoice

Shows the choices for a poll posted in the feed. This object is available in API version 29.0 and later.

FeedPollVote

Shows how users voted on a poll posted in the feed. This object is available in API version 29.0 and later.

FeedPost

FeedPost represents the following types of changes in a record feed, such as AccountFeed: text posts, link posts, and content posts. This object is available in API version 18.0 through 21.0. FeedPost is no longer available in later versions. Starting with API version 21.0, use FeedItem to represent text posts, link posts, and content posts in feeds.

FeedRevision

Holds the revision history of a specific feed item or comment, including a list of attributes that changed for each revision. This object is available in API version 34.0 and later.

FeedTrackedChange

Represents an individual field change or set of field changes. A FeedTrackedChange is a child object of a record feed, such as AccountFeed This object is available in API version 18.0 and later..

FieldHistoryArchive

Represents field history values for all objects that retain field history. `FieldHistoryArchive` is a big object, available only to users with the "Retain Field History" permission. This object is available in API version 29.0 and later.

FieldPermissions

Represents the enabled field permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

FieldServiceMobileSettings

Represents a configuration of settings that control the Field Service Lightning iOS and Android mobile app experience. This object is available in API version 38.0 and later.

FiscalYearSettings

Settings to define a custom or standard fiscal year for your organization. This object has a parent-child relationship with the Period object.

FlexQueueItem

Represents an asynchronous Apex job in the Apex flex queue. Provides information about the job type and flex queue position of the AsyncApexJob. This object is available in API version 36.0 and later.

FlowInterview

Represents a flow interview. A *flow interview* is a running instance of a flow.

FlowInterviewOwnerSharingRule

Represents the rules for sharing a FlowInterview with users other than the owner. This object is available in API version 33.0 and later.

FlowInterviewShare

Represents a sharing entry on a FlowInterview. This object is available in API version 33.0 and later.

FlowRecordRelation

Represents a relationship between a record and a flow interview. When a flow interview is paused, Salesforce uses the $Flow.CurrentRecord system variable in the flow to associate the interview with a record. Available in API version 42.0 and later.

FlowStageRelation

Represents a relationship between a paused flow interview and its stages. When a flow interview is paused, Salesforce creates a FlowStageRelation record for each stage that's set to the `$Flow.CurrentStage` or `$Flow.ActiveStages` system variable. Available in API version 43.0 and later.

Folder

Represents a repository for a Document, EmailTemplate, Report, or Dashboard. Only one type of item can be contained in a folder.

FolderedContentDocument

Represents the relationship between a parent and child ContentFolderItem in a ContentWorkspace.

ForecastingAdjustment

This object represents an individual sales manager's adjustment for a subordinate's forecast via a ForecastingItem. Available in API versions 26 and greater. This object is separate from the ForecastingOwnerAdjustment object, which represents forecast users' adjustments of their *own* forecasts.

ForecastingDisplayedFamily

Represents the table in Forecasts Settings where an admin selects the product families that users can forecast on in Lightning Experience. This object is available in API version 40.0 and later.

ForecastingFact

This is a read-only object linking a ForecastingItem with its opportunities, such as opportunities that share the same owner or forecast category and have a closing date within the period of the forecasting item. Available in API versions 26 and greater.

ForecastingItem

This is a read-only object used for individual forecast amounts. Users see amounts based on their perspectives and forecast roles. The amounts users see include one of the following when forecasting in revenue: `AmountWithoutAdjustments`, `AmountWithoutManagerAdjustment`, `ForecastAmount`, `OwnerOnlyAmount`. The amounts users see include one of the following when forecasting in quantity: `QuantityWithoutAdjustments`, `QuantityWithoutManagerAdjustment`, `ForecastQuantity`, `OwnerOnlyQuantity`. Available in API versions 26 and greater.

ForecastingOwnerAdjustment

This object represents an individual forecast user's adjustment of their *own* forecast via a ForecastingItem. Available in API versions 33 and greater. This object is separate from the ForecastingAdjustment object, which represents managers' adjustments of *subordinates'* forecasts.

ForecastingQuota

This object represents an individual user's quota for a specified time period. The "Manage Quotas" user permission is required for creating, updating, or deleting quotas. (Users can only edit their subordinates' quotas, not their own.) The "View All Forecasts" permission is required to View any user's forecast, regardless of the forecast role hierarchy. Available in API versions 25 and greater. Forecast managers can view the forecasts of subordinates who report to them in the forecast hierarchy.

ForecastingType

This object is used to identify the forecast type associated with `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects. Available in API versions 30.0 and greater.

ForecastingUserPreference

Represents the forecasting selections that a user has made, such as display options, date range, forecasting type, and currency.

ForecastShare

Represents the sharing of a customizable forecast at a given role and territory.

Goal

The Goal object represents the components of a goal such as its name, description, and status.

GoalFeed

Represents a single feed item in the feed displayed for a Goal record. The goal feed shows changes to a goal for fields that are tracked in feeds, posts, and comments about the goal.

GoalHistory

This read-only object contains historical information about changes that have been made to the Goal object.

GoalLink

Represents the relationship between two goals. This is a many-to-many relationship, meaning that each goal can link to many other goals.

GoalShare

Represents a sharing entry on a Goal object.

GoogleDoc

Represents a link to a Google Document. This object is available in API version 14.0 and later.

Group

A set of User records.

GroupMember

Represents a User or Group that is a member of a public group.

HashtagDefinition

HashtagDefinition represents hashtag (#) topics in public Chatter posts and comments. Public posts and comments include those on profiles and in public groups, but not those on records or in private groups. This object is available in API version 26.0 and later.

Holiday

Represents a period of time during which your customer support team is unavailable. Business hours and escalation rules associated with business hours are suspended during any holidays with which they are affiliated.

IconDefinition

Represents the icon-related metadata for a custom tab. This object is available in API version 43.0 and later.

Idea

Represents an idea on which users are allowed to comment and vote, for example, a suggestion for an enhancement to an existing product or process. This object is available in API version 12 and later.

IdeaComment

Represents a comment that a user has submitted in response to an idea.

IdeaReputation

Represents a collection of statistics and scores derived from a user's activity within an Ideas zone or internal organization. This object is available in API version 28.0 and later.

IdeaReputationLevel

Represents a reputation level within an Ideas zone or internal organization and is used by the system to calculate reputation. You can create up to 25 levels per zone or internal organization. This object is available in API version 28.0 and later.

IdeaTheme

Represents an invitation to community members to submit ideas that are focused on a specific topic. This object is available in API version 26 and later.

Individual

Represents a customer's data privacy and protection preferences. Data privacy records based on the Individual object store your customers' preferences. Data privacy records are associated with related leads and contacts. This object is available in API version 42.0 and later.

IndividualHistory

Represents the history of changes to values in the fields of a data privacy record, based on the Individual object. This object is available in versions 42.0 and later.

IndividualShare

Represents a list of access levels to a data privacy record along with an explanation of the access level. For example, if you have access to a record because you own it, the `IndividualAccessLevel` is `All` and `RowCause` is Owner. This object is available in API version 42.0 and later.

KnowledgeableUser

Represents a user identified as knowledgeable about a specific topic, and ranks them relative to other knowledgeable users. This object is available in API version 31.0 and later.

KnowledgeArticle

Provides read-only access to an article and the ability to delete the master article. This object is available in API version 19.0 and later.

KnowledgeArticleVersion

Provides a global view of standard article fields across all article types depending on their version. This object is available in API version 18.0 and later.

KnowledgeArticleVersionHistory

Enables read-only access to the full history of an article. This object is available in API version 25.0 and later.

KnowledgeArticleViewStat

Provides statistics on the number of views for the specified article across all article types. This object is read-only and available in API version 20 and later.

KnowledgeArticleVoteStat

Provides the weighted rating for the specified article on a scale of 1 to 5 across all article types. This object is read-only and available in API version 20 and later.

Lead

Represents a prospect or lead.

LeadCleanInfo

Stores the metadata Data.com Clean uses to determine a lead record's clean status. Helps you automate the cleaning or related processing of lead records.

LeadFeed

Represents a single feed item in the feed displayed on the detail page for a lead record. This object is available in API version 18.0 and later.

LeadHistory

Represents the history of changes to the values in the fields of a lead.

LeadOwnerSharingRule

Represents the rules for sharing a lead with users other than the owner.

LeadShare

Represents a sharing entry on a Lead.

LeadStatus

Represents the status of a Lead, such as Open, Qualified, or Converted.

LeadTag

Associates a word or short phrase with a Lead.

LimitAllocationPerApp

Represents a connected app quota for an API limit. This object is available in API version 30.0 and later.

LineitemOverride

A forecast override of a line item on an Opportunity. This read-only object for customizable forecasting has a child-parent relationship with OpportunityOverride.

LinkedArticle

Represents a knowledge article that is attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

LinkedArticleFeed

Represents a single feed item on a linked knowledge article attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

LinkedArticleHistory

Represents the history of changes made to tracked fields on a linked article. This object is available in API version 37.0 and later.

ListEmail

Represents a list email in Salesforce. Available in API version 41.0 and later. Has a one-to-many relationship with ListEmailRecipientSource.

ListEmailRecipientSource

For a list email in Salesforce, represents the source of a recipient's email. Available in API version 41.0 and later.

ListView

Represents a list view. A list view specifies a set of records for an object, based on specific criteria. This object is available in API version 32.0 and later.

ListViewChart

Represents a graphical chart that's displayed on Salesforce for Android, iOS, and mobile web list views. The chart aggregates data that is filtered based on the list view that's currently displayed. This object is available in API version 33.0 and later.

ListViewChartInstance

Retrieves metadata for all standard and custom charts for a given entity in context of a given list view. This object is available in API versions 34.0 and later.

LiveAgentSession

This object is automatically created for each Life Agent session and stores information about the session. This object is available in API versions 28.0 and later.

LiveAgentSessionHistory

This object is automatically created for each Life Agent session and stores information about changes made to the session. This object is available in API versions 28.0 and later.

LiveAgentSessionOwnerSharingRule

Represents the rules for sharing a Life Agent session record with users other than the record owner. This object is available in API version 28.0 and later.

LiveAgentSessionShare

This object is automatically created for each Life Agent session and stores information about the session. This object is available in API versions 28.0 and later.

LiveChatBlockingRule

Represents a rule for blocking chat visitors' IP addresses from starting new chats with agents. This object is available in API version 34.0 and later.

LiveChatButton

Represents a button that allows visitors to request chats with Life Agent users. This object is available in API version 24.0 and later.

LiveChatButtonDeployment

Associates a Live Agent automated chat invitation with a specific deployment. This object is available in API versions 28.0 and later.

LiveChatButtonSkill

Represents all the skills available to a LiveChatButton except the one currently assigned. To retrieve the skill currently assigned, query LiveChatButton. This object is available in API version 25.0 and later.

LiveChatDeployment

Represents the general settings for deploying Life Agent on a website. This object is available in API version 24.0 and later.

LiveChatSensitiveDataRule

Represents a rule for masking or deleting data of a specified pattern. Written as a regular expression (regex). This object is available in API version 35.0 and later.

LiveChatTranscript

This object is automatically created for each Life Agent chat session and stores information about the session. This object is available in API version 24.0 and later.

LiveChatTranscriptEvent

Captures specific events that occur over the lifetime of a chat. This object is available in API version 24.0 and later.

LiveChatTranscriptHistory

Represents changes to field values on a LiveChatTranscript object. This object is available in API version 24.0 and later.

LiveChatTranscriptOwnerSharingRule

Represents the rules for sharing a Life Agent chat transcript record with users other than the record owner. This object is available in API version 29.0 and later.

LiveChatTranscriptShare

Represents a sharing entry on a LiveChatTranscript object. This object is available in API version 24.0 and later.

LiveChatTranscriptSkill

Represents a join between LiveChatTranscript and Skill. This object is available in API version 25.0 and later.

LiveChatUserConfig

Represents a setting that controls the console settings for Life Agent users. This object is available in API version 24.0 and later.

LiveChatUserConfigProfile

Represents a join between LiveChatUserConfig and Profile. This object is available in API version 24.0 and later.

LiveChatUserConfigUser

Represents a join between LiveChatUserConfig and User. This object is available in API version 24.0 and later.

LiveChatVisitor

Represents a website visitor who has started or tried to start a chat session. This object is available in API version 24.0 and later.

Location

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work.

LocationFeed

Represents a single feed item on a field service location record detail page.

LoginEvent

Represents a trackable user login event in your org. In the Real-Time Events pilot, only UI logins with username and password are captured. This object is available in API version 36.0 and later.

LoginGeo

Represents the geographic location of the user's IP address for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) may vary. This object is available in API version 34.0 and later.

LoginHistory

Represents the login history for all successful and failed login attempts for organizations and enabled portals. This object is available in API version 21.0 and later.

LoginIp

Represents a validated IP address. This object is available in version 28.0 and later.

LogoutEventStream (Beta)

LogoutEventStream represents an event associated with a user UI logout. A logout event records a successful user logout from your org's UI. This object is read only, and you can't retrieve it using a SOQL query. This object is available in API version 41.0 and later.

LookedUpFromActivity

This read-only object is displayed as a related list on an activity record (an event or a task); the list contains records that have custom lookup relationships from the activity to another object. This object is not queryable.

Macro

Represents a macro, which is a set of instructions that tells the system to perform one or more tasks. This object is available in API version 32.0 and later.

MacroInstruction

Represents an instruction in a macro. An instruction can specify the object that the macro interacts with, the context or publisher that the macro works within, the operation or action that the macro performs, and the target of the macro's actions. It is a useful way to programmatically define instructions, instead of using the macro widget in the console.

MailmergeTemplate

Represents a mail merge template (a Microsoft Word document) used for performing mail merges for your organization.

MaintenanceAsset

Represents an asset covered by a maintenance plan in field service. Assets can be associated with multiple maintenance plans.

MaintenancePlan

Represents a preventive maintenance schedule for one or more assets in field service.

MatchingRule

Represents a matching rule that is used to identify duplicate records. This object is available in API version 33.0 and later.

MatchingRuleItem

Represents criteria used by a matching rule to identify duplicate records. This object is available in API version 33.0 and later.

MetadataPackage

Represents a managed or unmanaged package that has been developed in the org you're logged in to.

MetadataPackageVersion

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to.

Metric

The Metric object represents the components of a goal metric such as its name, metric type, and current value.

MetricDataLink

The link between the metric and the data source, such as a report.

MetricDataLinkHistory

This read-only object contains historical information about changes that have been made to the MetricDataLink object.

MetricFeed

Represents a single feed item in the feed displayed on a Metric record.

MetricHistory

This read-only object contains historical information about changes that have been made to the Metric object.

MetricsDataFile

Represents a data file containing usage metrics on all installations of a managed package in a Salesforce instance. This object is available in API version 30.0 and later.

MetricShare

Represents a sharing entry on a Metric object.

MilestoneType

Represents a milestone (required step in a customer support process). This object is available in API version 18.0 and later.

MobileSettingsAssignment

Represents the assignment of a particular field service mobile settings configuration to a user profile. This object is available in API version 41.0 and later.

Name

Non-queryable object that provides information about foreign key traversals when the foreign key has more than one parent.

NamedCredential

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 33.0 and later.

NamespaceRegistry

Represents a namespace that you can link to scratch orgs that were created from your org's Dev Hub. You use the namespace when developing, packaging, and releasing an app. You can't create this object with the API. Use the **Link Namespace** action in the Dev Hub graphical interface to insert a `NamespaceRegistry` record. This object is available in API version 41.0 and later.

NavigationLinkSet

Represents the navigation menu in a community. A navigation menu consists of items that users can click to go to other parts of the community. This object is available in API version 35.0 and later.

NavigationMenuItem

Represents a single menu item in a NavigationLinkSet. Use this object to create, delete, or update menu items in your community's navigation menu. This object is available in API version 35.0 and later.

NavigationMenuItemLocalization

Represents the translated value of a navigation menu item in a community. This object is available in API version 36.0 and later.

Network

Represents a community, which is a customizable public or private space where employees, end-customers, and partners can collaborate on best practices and business processes. Communities give you the opportunity to share information, records, and files with coworkers and related external stakeholders all in one place. This object is available in API version 26.0 and later.

NetworkActivityAudit

Represents an audit trail of moderation actions in Communities. This object is available in API version 30.0 and later.

NetworkAffinity

Represents a junction object that associates a user profile with a Network object, that is, with a community. Use NetworkAffinity to assign a default community to a user profile. This object is available in API version 41.0 and later.

NetworkMember

Represents a member of a community. Members can be either users in your company or external users with portal profiles. This object is available in API version 26.0 and later.

NetworkMemberGroup

Represents a group of members in a community. Members can be either users in your internal organization or external users assigned portal profiles. An administrator adds members to a community by adding a profile or a permission set, and any user with the profile or permission set becomes a member of the community. This object is available in API version 26.0 and later.

NetworkModeration

Represents a flag on an item in a community. This object is available in API version 30.0 and later.

NetworkPageOverride

Represents information about custom pages used to override the default pages in communities. You can create Community Builder (Site.com Studio) or Visualforce pages and override the default pages in a community. Using custom pages allows you to create a more personalized experience for your users. This object is available in API version 34.0 and later.

NetworkSelfRegistration

Represents the account that self-registering community members are associated with by default. Self-registering users in a community are required to be associated with an account, which the administrator must specify while setting up self-registration for the community. If an account isn't specified, Salesforce creates person accounts (when enabled) for self-registering users. This object is available in API version 34.0 and later.

NetworkUserHistoryRecent

Represents a community user's history of accessed records. This object is available in API version 42.0 and later.

NewsFeed

Represents a single feed item on a user's home tab. A Chatter feed shows recent changes to records that the user is following.

Note

Represents a note, which is text associated with a custom object or a standard object, such as a Contact, Contract, or Opportunity.

OauthToken

Represents an OAuth access token for connected app authentication and can be used to create a user interface for token management. This object is available in API version 32.0 and later.

NoteAndAttachment

This read-only object contains all notes and attachments associated with an object.

NoteTag

Associates a word or short phrase with a Note.

ObjectPermissions

Represents the enabled object permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

ObjectTerritory2AssignmentRule

Represents a territory assignment rule that's associated with an object, such as Account. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the BooleanFilter field on its corresponding ObjectTerritory2AssignmentRule is `null`. Available only if Enterprise Territory Management has been enabled for your organization.

ObjectTerritory2AssignmentRuleItem

A single row of selection criteria for an ObjectTerritory2AssignmentRule object. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the `BooleanFilter` field on its corresponding ObjectTerritory2AssignmentRule object is a `null` value. Available only if Enterprise Territory Management has been enabled for your organization.

ObjectTerritory2Association

Represents an association (by assignment) between a territory and an object record, such as an account. Available only if Enterprise Territory Management has been enabled for your Salesforce org.

OpenActivity

This read-only object is displayed in a related list of open activities—future events and open tasks—related to an object. It includes activities for all contacts related to the object. OpenActivity fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

OperatingHours

Represents the hours in which a service territory, service resource, or account is available for field service work. This object is available in API version 38.0 and later.

OperatingHoursFeed

Represents a single feed item on an operating hours record detail page. This object is available in API version 38.0 and later.

OperatingHoursHistory

Represents the history of changes made to tracked fields on an operating hours record. This object is available in API version 38.0 and later.

Opportunity

Represents an opportunity, which is a sale or pending deal.

OpportunityCompetitor

Represents a competitor on an Opportunity.

OpportunityContactRole

Represents the role that a Contact plays on an Opportunity.

OpportunityFeed

Represents a single feed item in the feed displayed on the detail page for an opportunity record. This object is available in API version 18.0 and later.

OpportunityFieldHistory

Represents the history of changes to the values in the fields of an opportunity. This object is available in versions 13.0 and later.

OpportunityHistory

Represents the stage history of an Opportunity.

OpportunityLineItem

Represents an opportunity line item, which is a member of the list of Product2 products associated with an Opportunity.

OpportunityLineItemSchedule

Represents information about the quantity, revenue distribution, and delivery dates for a particular OpportunityLineItem.

OpportunityOverride

Represents a forecast override of an Opportunity. This read-only object is specific to customizable forecasting. It has a parent-child relationship with LineitemOverride.

OpportunityOwnerSharingRule

Represents a rule for sharing an opportunity with users other than the owner.

OpportunityPartner

This read-only object represents a partner relationship between an Account and an Opportunity. This object is automatically created when a Partner object is created for a partner relationship between an account and an opportunity.

OpportunityShare

Represents a sharing entry on an Opportunity.

OpportunitySplit

OpportunitySplit credits one or more opportunity team members with a portion of the opportunity amount. This object is available in API version 16.0 and later for pilot customers, and version 28.0 and later for others.

OpportunitySplitType

OpportunitySplitType provides unique labels and behavior for each split type. This object is available in API version 28.0 and later.

OpportunityStage

Represents the stage of an Opportunity in the sales pipeline, such as New Lead, Negotiating, Pending, Closed, and so on.

OpportunityTag

Associates a word or short phrase with an Opportunity.

OpportunityTeamMember

Represents a User on the opportunity team of an Opportunity.

Order

Represents an order associated with a contract or an account.

OrderFeed

Represents a single feed item in the feed displayed on an order.

OrderHistory

Represents historical information about changes that have been made to the standard fields of the associated order, or to any custom fields with history tracking enabled.

OrderItem

Represents an order product that your organization sells.

OrderItemFeed

Represents a single feed item in the feed displayed on the detail page for an order product record.

OrderItemHistory

Represents the history of changes to the values in the fields of an order product.

OrderOwnerSharingRule

Represents a rule which determines order sharing access for the order's owners.

Organization

Represents key configuration information for an organization.

OrgDeleteRequest

Represents a request to delete a developer edition (DE) org. This object is available in API version 42.0 and later. It is available only in Developer and Database.com editions.

OrgWideEmailAddress

Represents an organization-wide email address for user profiles.

OutOfOffice

Represents a user-set value on a profile that shows when the user intends to be out of the office. This object is available in API version 41.0 and later.

OwnedContentDocument

Represents a file owned by a user. This object is available in version 30.0 and later.

PackageLicense

Represents a license for an installed managed package. This object is available in API version 31.0 and later.

PackagePushError

Represents an error encountered during a push request. The number of PackagePushError records created depends on the number of push jobs in the request that result in an error.

PackagePushJob

Represents an individual push job for upgrading a package in an org from one version to another version. There can be multiple push jobs created for one push request. For example, if you want to upgrade five orgs as part of one push, you have one PackagePushRequest record and five PackagePushJob records.

PackagePushRequest

Represents the push request for upgrading a package in one or many orgs from one version to another version.

PackageSubscriber

Represents an installation of a package in an org. This object contains installation information for managed packages developed in the org you're logged in to.

Partner

Represents a partner relationship between two Account records or between an Opportunity and an Account.

PartnerFundAllocation

Represents allocated funds from a partner marketing budget for channel partners. This object is available in API version 41.0 and later.

PartnerFundAllocationFeed

Represents a single feed item on a partner fund allocation feed. This object is available in API version 41.0 and later.

PartnerFundAllocationHistory

Represents the history of changes to the values in the fields of a partner fund allocation object. Access is read-only. This object is available in API version 41.0 and later.

PartnerFundAllocationOwnerSharingRule

Represents a rule for sharing a partner fund allocation object with users other than the owner. This object is available in API version 41.0 and later.

PartnerFundAllocationShare

Represents a sharing entry on a partner fund allocation record. This object is available in API version 41.0 and later.

PartnerFundClaim

Represents a claim of funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

PartnerFundClaimFeed

Represents a single feed item on a partner fund claim feed. This object is available in API version 41.0 and later.

PartnerFundClaimHistory

Represents the history of changes to the values in the fields of a partner fund claim object. Access is read-only. This object is available in API version 41.0 and later.

PartnerFundClaimOwnerSharingRule

Represents a rule for sharing a partner fund claim object with users other than the owner. This object is available in API version 41.0 and later.

PartnerFundClaimShare

Represents a sharing entry on a partner fund claim record. This object is available in API version 41.0 and later.

PartnerFundRequest

Represents a request for funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

PartnerFundRequestFeed

Represents a single feed item on a partner fund request feed. This object is available in API version 41.0 and later.

PartnerFundRequestHistory

Represents the history of changes to the values in the fields of a partner fund request object. Access is read-only. This object is available in API version 41.0 and later.

PartnerFundRequestOwnerSharingRule

Represents a rule for sharing a partner fund request object with users other than the owner. This object is available in API version 41.0 and later.

PartnerFundRequestShare

Represents a sharing entry on a partner fund request record. This object is available in API version 41.0 and later.

PartnerMarketingBudget

Represents a budget that provides funds to channel partners for selling and marketing products and services. This object is available in API version 41.0 and later.

PartnerMarketingBudgetFeed

Represents a single feed item on a partner marketing budget feed. This object is available in API version 41.0 and later.

PartnerMarketingBudgetHistory

Represents the history of changes to the values in the fields of a partner marketing budget object. Access is read-only. This object is available in API version 41.0 and later.

PartnerMarketingBudgetOwnerSharingRule

Represents a rule for sharing a partner marketing budget object with users other than the owner. This object is available in API version 41.0 and later.

PartnerMarketingBudgetShare

Represents a sharing entry on a partner marketing budget record. This object is available in API version 41.0 and later.

PartnerNetworkConnection

Represents a Salesforce to Salesforce connection between Salesforce organizations.

PartnerNetworkRecordConnection

Represents a record shared between Salesforce organizations using Salesforce to Salesforce.

PartnerNetworkSyncLog

Represents the Org Sync Log tab in Salesforce, where Salesforce administrators can track the replication of record inserts and updates being performed in Organization Sync. The Connection Detail page for the replication connection also displays the Org Sync Log's twenty most recent entries, and provides a link to the log.

PartnerRole

Represents a role for an account Partner, such as consultant, supplier, and so on.

Period

Represents a fiscal period defined in FiscalYearSettings.

PermissionSet

Represents a set of permissions that's used to grant additional access to one or more users without changing their profile or reassigning profiles. This object is available in API version 22.0 and later.

PermissionSetAssignment

Represents the association between a User and a PermissionSet. This object is available in API version 22.0 and later.

PermissionSetLicense

Represents a license that's used to enable one or more users to receive a specified permission without changing their profile or reassigning profiles. You can use permission set licenses to grant access, but not to deny access. This object is available in API version 29.0 and later.

PermissionSetLicenseAssign

Represents the association between a User and a PermissionSetLicense. This object is available in API version 29.0 and later.

PlatformAction

PlatformAction is a virtual read-only object. It enables you to query for actions displayed in the UI, given a user, a context, device format, and a record ID. Examples include standard and custom buttons, quick actions, and productivity actions.

PresenceUserConfig

Represents a configuration that determines a presence user's settings. This object is available in API version 32.0 and later.

PresenceUserConfigProfile

Represents a configuration that determines the settings that are assigned to presence users who are assigned to a specific profile. User-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

PresenceUserConfigUser

Represents a configuration that determines the settings that are assigned to a presence user. These user-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

Pricebook2

Represents a price book that contains the list of products that your org sells.

Pricebook2History

Represents historical information about changes that have been made to the standard fields of the associated Pricebook2, or to any custom fields with history tracking enabled. This object is available in API version 43.0 and later.

PricebookEntry

Represents a product entry (an association between a Pricebook2 and Product2) in a price book.

ProcessDefinition

Represents the definition of a single approval process.

ProcessInstance

Represents an instance of a single, end-to-end approval process. Use this and the node, step, and workitem process instance objects to create approval history reports.

ProcessInstanceHistory

This read-only object shows all steps and pending approval requests associated with an approval process (ProcessInstance).

ProcessInstanceStep

Represents one work item in an approval process (ProcessInstance).

ProcessInstanceNode

Represents a step in an instance of an approval process. Compare to ProcessNode, which describes the step in a process definition. Use this object to retrieve approval history.

ProcessInstanceWorkitem

Represents a user's pending approval request.

ProcessNode

Describes a step in a process definition. Compare to ProcessInstanceNode, which describes the step in a running process.

Product2

Represents a product that your org sells.

Product2Feed

Represents a single feed item in the feed displayed on the detail page for a product record. This object is available in API version 18.0 and later.

ProductConsumed

Represents an item from your inventory that was used to complete a work order or work order line item in field service.

ProductEntitlementTemplate

Represents predefined terms of customer support (Entitlement) that users can add to products (Product2).

ProductItem

Represents the stock of a particular product at a particular location in field service, such as all bolts stored in your main warehouse.

ProductItemTransaction

Represents an action taken on a product item in field service. Product item transactions are auto-generated records that help you track when a product item is replenished, consumed, or adjusted.

ProductRequest

Represents an order for a part or parts in field service.

ProductRequestFeed

Represents a single feed item on an product request record detail page.

ProductRequestHistory

Represents historical information about changes that have been made to the standard fields of the associated product request, or to any custom fields with history tracking enabled.

ProductRequestLineItem

Represents a request for a part in field service. Product request line items are components of product requests.

ProductRequestOwnerSharingRule

Represents the rules for sharing a product request with users other than the owner.

ProductRequestShare

Represents a sharing entry on a product request object.

ProductRequired

Represents a product that is needed to complete a work order or work order line item in field service.

ProductTransfer

Represents the transfer of inventory between locations in field service.

ProductTransferFeed

Represents a single feed item in the feed displayed on the detail page for a product transfer record.

ProductTransferHistory

Represents historical information about changes that have been made to the standard fields of the associated product transfer, or to any custom fields with history tracking enabled.

ProductTransferOwnerSharingRule

Represents the rules for sharing a product transfer with users other than the owner.

ProductTransferShare

Represents a sharing entry on a product transfer object.

Profile

Represents a profile, which defines a set of permissions to perform different operations, such as querying, adding, updating, or deleting information.

ProfileSkill

Represents a profile skill, which describes a user's professional knowledge. This is a global record for the organization, and users are associated through the ProfileSkillUser object.

ProfileSkillEndorsement

Represents a detail relationship of ProfileSkillUser. An endorsement of a profile skill shows approval and support of another user's publicly declared skill.

ProfileSkillEndorsementFeed

Represents a single feed item in the feed displayed on the detail page for a ProfileSkillEndorsement record. This object is available in API version 34.0 and later.

ProfileSkillEndorsementHistory

Represents the history of changes to the fields of a ProfileSkillEndorsement.

ProfileSkillFeed

Represents a single feed item in the feed displayed on the detail page for a profile skill.

ProfileSkillHistory

Represents the history of changes to the fields of a ProfileSkill.

ProfileSkillShare

Represents a sharing entry on a ProfileSkill.

ProfileSkillUser

Represents a detail relationship of User. The object connects profile skills with users.

ProfileSkillUserFeed

Represents a single feed item in the feed displayed on the detail page for a ProfileSkillUser record. This object is available in API version 34.0 and later.

ProfileSkillUserHistory

Represents the history of changes to the fields of a ProfileSkillUser.

PushTopic

QuantityForecast

Represents a quantity-based forecast.

QuantityForecastHistory

Represents historical information about quantity-based forecasts that have been submitted (saved) in the user interface.

QueueRoutingConfig

Represents the settings that determine how work items are routed to agents. This object is available in API version 32.0 and later.

Question

Represents a question in a community that users can view and reply to.

QuestionDataCategorySelection

A data category selection represents a data category that classifies a question.

QuestionReportAbuse

Represents a user-reported abuse on a Question in a Chatter Answers community. This object is available in API version 24.0 and later.

QuestionSubscription

Represents a subscription for a user following a Question. This object is available in API version 24.0 and later.

QueueSobject

Represents the mapping between a queue Group and the sObject types associated with the queue, including custom objects.

QuickText

This object stores a snippet of text that allows users to send a quick response to a customer. Use quick text to create greetings, answers to common questions, short notes, and more. This object is available in API version 24.0 and later.

QuickTextHistory

Represents changes to field values on a QuickText object. This object is available in API version 24.0 and later.

QuickTextOwnerSharingRule

Represents a rule for sharing a QuickText object with users other than the owner.

QuickTextShare

Represents a sharing entry on a QuickText object. This object is available in API version 24.0 and later.

Quote

The Quote object represents a quote, which is a record showing proposed prices for products and services. Available in API version 18.0 and later.

QuoteDocument

Represents a quote in document format. Available in API version 18.0 and later.

QuoteFeed

Represents a single feed item on the quote record detail page. This object is available in API version 39.0 and later.

QuoteLineItem

The QuoteLineItem object represents a quote line item, which is a member of the list of Product2 products associated with a Quote, along with other information about those line items on that quote. Available in API version 18.0 and later.

QuoteOwnerSharingRule

Represents a rule for sharing a Quote with users other than the owner. This object is available in API version 41.0 and later.

QuoteShare

Represents a sharing entry on a Quote. This object is available in API version 41.0 and later.

RecentlyViewed

Represents records that the current user has recently viewed or referenced (by viewing a related record).

RecordAction

Represents a relationship between a record and a flow. Create a RecordAction for every flow you want associated to a particular record. Available in API version 42.0 and later.

RecordType

Represents a record type.

RecordTypeLocalization

Represents the translated value of a label for a record type when the Translation Workbench is enabled for your organization.

Reply

Represents a reply that a user has submitted to a question in an answers community.

ReplyReportAbuse

Represents a user-reported abuse on a Reply in a Chatter Answers community. This object is available in API version 24.0 and later.

Report

Represents a report, a set of data that meets certain criteria, displayed in an organized way. Access is read-only. This object is available in API version 20.0 and later.

ReportFeed

Represents a single feed item in the feed displayed on a report. This object is available in API version 20.0 and later.

ReportTag

Associates a word or short phrase with a Report. This object is available in API version 20.0 and later.

ReputationLevel

Represents a reputation level defined for a community. This object is available in API version 32.0 and later.

ReputationLevelLocalization

Represents the translated value of a reputation level. Reputation level localization only applies for reputation levels in communities. This object is available in API version 35.0 and later.

ReputationPointsRule

Represents the reputation point rules for a community. Each rule specifies an action that community members can earn points from and the points associated with those actions in a particular community. This object is available in API version 32.0 and later.

ResourceAbsence

Represents a time period in which a service resource is unavailable to work. This object is available in API version 38.0 and later.

ResourceAbsenceFeed

Represents a single feed item on a resource absence record detail page. This object is available in API version 38.0 and later.

ResourceAbsenceHistory

Represents the history of changes made to tracked fields on a resource absence. This object is available in API version 38.0 and later.

ResourcePreference

Represents an account's preference for a specified service resource on field service work.

ResourcePreferenceFeed

Represents a single feed item on a resource preference record detail page.

ResourcePreferenceHistory

Represents the history of changes made to tracked fields on a resource preference.

ReturnOrder

Represents the return or repair of inventory or products in field service. This object is available in API version 42.0 and later.

ReturnOrderFeed

Represents a single feed item on a return order record detail page. This object is available in API version 42.0 and later.

ReturnOrderHistory

Represents the history of changes made to tracked fields on a return order. This object is available in API version 42.0 and later.

ReturnOrderLineItem

Represents a specific product that is returned or repaired as part of a return order in field service. This object is available in API version 42.0 and later.

ReturnOrderLineItemFeed

Represents a single feed item on a return order line item record detail page. This object is available in API version 42.0 and later.

ReturnOrderLineItemHistory

Represents the history of changes made to tracked fields on a return order line item. This object is available in API version 42.0 and later.

ReturnOrderOwnerSharingRule

Represents the rules for sharing a return order with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 42.0 and later.

ReturnOrderShare

Represents a sharing entry on a return order. This object is available in API version 42.0 and later.

RevenueForecast

Represents a revenue-based forecast.

RevenueForecastHistory

Represents historical information about revenue-based forecasts that have been submitted (saved) in the user interface.

RuleTerritory2Association

Represents a record-assignment rule and its association to an object, such as Account. Available only if Enterprise Territory Management has been enabled for your organization.

SamlSsoConfig

Represents a SAML Single Sign-On configuration. This object is available in API version 32.0 and later.

Scontrol

A custom s-control, which is custom content that is hosted by the system but executed by the client application.

ScontrolLocalization

The translated value of the field label for an s-control.

ScratchOrgInfo

Represents a scratch org and its audit log. Use this object to create a scratch org and keep a log of its creation and deletion. This object is available in API version 41.0 and later.

SearchPromotionRule

Represents a promoted search term, which is one or more keywords that you associate with a Salesforce Knowledge article. When a user's search query includes these keywords, the associated article is returned first in search results. This object is available in API version 31.0 and later.

SecureAgent

Represents a Secure Agent that connects Salesforce to on-premises external data sources like SharePoint 2010 and 2013. This object is available in API version 32.0 and later.

SecureAgentsCluster

Represents a cluster consisting of several Secure Agents on different servers. Clusters provide failover protection if an agent on a particular server becomes inaccessible. This object is available in API version 35.0 and later.

SecurityCustomBaseline

Provides the ability to read, create, and delete user-defined custom security baselines, which define an org's security standards. This object is available in API version 39.0 and later.

SelfServiceUser

Represents a Contact who has been enabled to use your organization's Self-Service portal, where he or she can obtain online support.

ServiceAppointment

Represents an appointment to complete field service work for a customer. This object is available in API version 38.0 and later.

ServiceAppointmentFeed

Represents a single feed item on a service appointment record detail page. This object is available in API version 38.0 and later.

ServiceAppointmentHistory

Represents the history of changes made to tracked fields on a service appointment. This object is available in API version 38.0 and later.

ServiceAppointmentOwnerSharingRule

Represents the rules for sharing a service appointment with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

ServiceAppointmentShare

Represents a sharing entry on a service appointment. This object is available in API version 38.0 and later.

ServiceAppointmentStatus

Represents a possible status of a service appointment in field service.

ServiceChannel

Represents a channel of work items that are received from your organization—for example, cases, chats, or leads. This object is available in API version 32.0 and later.

ServiceChannelStatus

Represents the status that's associated with a specific service channel. This object is available in API version 32.0 and later.

ServiceContract

Represents a customer support contract (business agreement). This object is available in API version 18.0 and later.

ServiceContractFeed

Represents a single feed item in the feed displayed on the detail page for a service contract record. This object is available in API version 23.0 and later.

ServiceContractHistory

Represents the history of changes to the values in the fields on a ServiceContract (customer support agreement). This object is available in API version 18.0 and later.

ServiceContractOwnerSharingRule

Represents the rules for sharing a ServiceContract (customer service agreement) with users other than the owner. This object is available in API version 18.0 and later.

ServiceContractShare

Represents a sharing entry on a ServiceContract (customer support agreement). This object is available in API version 18.0 and later.

ServiceCrew

Represents a group of service resources who can be assigned to service appointments as a unit.

ServiceCrewFeed

Represents a single feed item on a service crew record detail page.

ServiceCrewHistory

Represents the history of changes made to tracked fields on a service crew.

ServiceCrewMember

Represents a technician service resource that belongs to a service crew.

ServiceCrewMemberFeed

Represents a single feed item on a service crew member record detail page.

ServiceCrewMemberHistory

Represents the history of changes made to tracked fields on a service crew member.

ServiceCrewOwnerSharingRule

Represents the rules for sharing a service crew with user records other than the owner or anyone above the owner in the role hierarchy.

ServiceCrewShare

Represents a sharing entry on a service crew.

ServicePresenceStatus

Represents a presence status that can be assigned to a service channel. This object is available in API version 32.0 and later.

ServiceReport

Represents a report that summarizes a work order, work order line item, or service appointment.

ServiceReportLayout

Represents a service report template in field service.

ServiceResource

Represents a service technician or service crew in field service. This object is available in API version 38.0 and later.

ServiceResourceCapacity

Represents the maximum number of scheduled hours or number of service appointments that a capacity-based service resource can complete within a specific time period. This object is available in API version 38.0 and later.

ServiceResourceCapacityFeed

Represents a single feed item on a service resource capacity record detail page. This object is available in API version 38.0 and later.

ServiceResourceCapacityHistory

Represents the history of changes made to tracked fields on a service resource capacity record. This object is available in API version 38.0 and later.

ServiceResourceFeed

Represents a single feed item on a service resource record detail page. This object is available in API version 38.0 and later.

ServiceResourceHistory

Represents the history of changes made to tracked fields on a service resource. This object is available in API version 38.0 and later.

ServiceResourceOwnerSharingRule

Represents the rules for sharing a service resource with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

ServiceResourceShare

Represents a sharing entry on a service resource. This object is available in API version 38.0 and later.

ServiceResourceSkill

Represents a skill that a service resource possesses. This object is available in API version 38.0 and later.

ServiceResourceSkillFeed

Represents a single feed item on a service resource skill record detail page. This object is available in API version 38.0 and later.

ServiceResourceSkillHistory

Represents the history of changes made to tracked fields on a service resource skill. This object is available in API version 38.0 and later.

ServiceTerritory

Represents a geographic or functional region in which field service work can be performed. This object is available in API version 38.0 and later.

ServiceTerritoryFeed

Represents a single feed item on a service territory record detail page. This object is available in API version 38.0 and later.

ServiceTerritoryHistory

Represents the history of changes made to tracked fields on a service territory. This object is available in API version 38.0 and later.

ServiceTerritoryLocation

Represents a location associated with a particular service territory in field service.

ServiceTerritoryMember

Represents a service resource who can be assigned to service appointments in a service territory. This object is available in API version 38.0 and later.

ServiceTerritoryMemberFeed

Represents a single feed item on a service territory member record detail page. This object is available in API version 38.0 and later.

ServiceTerritoryMemberHistory

Represents the history of changes made to tracked fields on a service territory member. This object is available in API version 38.0 and later.

SessionPermSetActivation

The SessionPermSetActivation object represents a permission set assignment activated during an individual user session. When a SessionPermSetActivation object is inserted into a permission set, an activation event fires, allowing the permission settings to apply to the user's specific session. This object is available in API versions 37.0 and later.

SetupAuditTrail

Represents changes you or other admins made in your org's Setup area for at least the last 180 days. This object is available in API version 15.0 and later.

SetupEntityAccess

Represents the enabled setup entity access settings (such as for Apex classes) for the parent PermissionSet. This object is available in API version 25.0 and later.

Shipment

Represents the transport of inventory in field service.

SignupRequest

Represents a request for a new signup. This object is available in API version 27.0 and later.

Site

Represents a public website that is integrated with an org. This object is available in API version 16.0 and later.

SiteDomain

SiteDomain is a read-only object, and a one-to-many replacement for the Site.TopLevelDomain field. This object is available in API version 21.0, and has been deprecated as of API version 26.0. In API version 26.0 and later, use the Domain and DomainSite objects instead.

SiteHistory

Represents the history of changes to the values in the fields of a site. This object is generally available in API version 18.0 and later.

Skill

Represents a category or group that Life Agent users or field service resources can be assigned to. This object is available in API version 24.0 and later.

SkillProfile

Represents a join between Skill and Profile. This object is available in API version 24.0 and later.

SkillRequirement

Represents a skill that is required to complete a particular task. Skill requirements can be added to work types, work orders, and work order line items in Field Service. This object is available in API version 38.0 and later. You also can add skill requirements to work items in Omni-Channel skills-based routing using API version 42.0 and later.

SkillRequirementFeed

Represents a single feed item on a skill requirement record detail page. This object is available in API version 38.0 and later.

SkillRequirementHistory

Represents the history of changes made to tracked fields on a skill requirement. This object is available in API version 38.0 and later.

SkillUser

Represents a join between Skill and User. This object is available in API version 24.0 and later.

SlaProcess

Represents an entitlement process associated with an Entitlement. This object is available in API version 19.0 and later.

Solution

Represents a detailed description of a customer issue and the resolution of that issue.

SolutionFeed

Represents a single feed item in the feed displayed on the detail page for a solution record. This object is available in API version 18.0 and later.

SolutionHistory

Represents the history of changes to the values in the fields of a solution.

SolutionStatus

Represents the status of a Solution, such as Draft, Reviewed, and so on.

SolutionTag

Associates a word or short phrase with a Solution.

SOSDeployment

Represents the general settings for deploying SOS video call capability in a native mobile application. This object is available in API version 34.0 and later.

SOSSession

This object is automatically created for each SOS session and stores information about the session. This object is available in API versions 34.0 and later.

SOSSessionActivity

Captures information about specific events that occur during an SOS video call, such as when an SOS call begins or ends. This object is available in API version 34.0 and later.

SOSSessionHistory

This object is automatically created for each SOS session and stores information about changes made to the session. This object is available in API versions 34.0 and later.

SOSSessionOwnerSharingRule

Represents the rules for sharing an SOS session record with users other than the record owner. This object is available in API version 34.0 and later.

SOSSessionShare

Represents a sharing entry on an SOS session. This object is available in API version 34.0 and later.

Stamp

Represents a User Specialty. This object is available in API version 39.0 and later.

StampAssignment

Represents assignment of a User Specialty to a user. This object is available in API version 39.0 and later.

StaticResource

Represents a static resource that can be used in Visualforce markup.

StreamingChannel

Survey

Represents a survey.

SurveyEmailBranding

Represents the configuration settings for invitation emails sent to survey participants for a particular survey.

SurveyFeed

Represents a single item in the feed displayed on the detail page for the Survey object. This object is available in API version 42.0 and later.

SurveyInvitation

Represents the invitation sent to a participant to complete the survey.

SurveyInvitationShare

Represents a sharing entry on a SurveyInvitation object.

SurveyPage

Represents a page, such as the title page or a question page, in a survey.

SurveyQuestion

Represents a question in a survey.

SurveyQuestionChoice

Represents an answer choice that a participant can select for a survey question.

SurveyQuestionResponse

Represents a participant's answer to a specific question.

SurveyResponse

Represents information about a participant's response to a survey, such as the status of the response, the participant's location, and when the survey was completed.

SurveyShare

Represents a sharing entry on a Survey object.

SurveyVersion

Represents a version of a survey.

TabDefinition

Represents a custom tab. Returns only the tabs that the current user has access to. This object is available in API version 43.0 and later.

TagDefinition

Defines the attributes of child Tag objects.

Task

Represents a business activity such as making a phone call or other to-do items. In the user interface, Task and Event records are collectively referred to as activities.

TaskFeed

Represents a single feed item in the feed on a Task. This object is available in API version 20.0 and later.

TaskPriority

Represents the importance or urgency of a Task, such as High, Normal, or Low.

TaskRelation

Represents the relationship between a task and a lead, contacts, and other objects related to the task. If Shared Activities is enabled, this object doesn't support triggers, workflow, or data validation rules. This object is available in API version 24.0 and later.

TaskStatus

Represents the status of a Task, such as Not Started, Completed, or Closed.

TaskTag

Associates a word or short phrase with a Task.

TaskWhoRelation

Represents the relationship between a task and a lead or contacts. This object is available in API version 29.0 and later.

TenantSecret

This object stores an encrypted organization-specific key fragment that is used with the master secret to produce organization-specific data encryption keys. This object is available in API version 34.0 and later.

Territory

Represents a flexible collection of accounts and users where the users have at least read access to the accounts, regardless of who owns the accounts. Only available if territory management has been enabled for your organization.

Territory2

Represents a sales territory. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2Model

Represents a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2ModelHistory

Represents the history of changes to the values in the fields on a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Territory2Type

Represents a category for territories (Territory2). Every Territory2 must have a Territory2Type. Available only if Enterprise Territory Management has been enabled for your organization.

TestSuiteMembership

Associates an Apex class with an ApexTestSuite. This object is available in API version 36.0 and later.

ThirdPartyAccountLink

Represents the list of external users who authenticated using an Auth. Provider. This object is available in API version 32.0 and later.

TimeSheet

Represents a schedule of a service resource's time in field service.

TimeSheetEntry

Represents a span of time that a service resource spends on a field service task.

TimeSheetEntryFeed

Represents a single feed item on a time sheet entry record detail page.

TimeSheetEntryHistory

Represents the history of changes made to tracked fields on a time sheet entry in field service.

TimeSheetFeed

Represents a single feed item on a time sheet record detail page.

TimeSheetHistory

Represents the history of changes made to tracked fields on a time sheet in field service.

TimeSheetOwnerSharingRule

Represents the rules for sharing a time sheet with user records other than the owner or anyone above the owner in the role hierarchy.

TimeSheetShare

Represents a sharing entry on a field service time sheet.

TimeSlot

Represents a period of time on a specified day of the week during which field service work can be performed. Operating hours consist of one or more time slots. This object is available in API version 38.0 and later.

TimeSlotHistory

Represents the history of changes made to tracked fields on a time slot. This object is available in API version 38.0 and later.

Topic

Represents a topic on a Chatter post or record. This object is available in API version 28.0 and later.

TopicAssignment

Represents the assignment of a topic to a specific feed item, record, or file. This object is available in API version 28.0 and later.

TopicFeed

Represents a single feed item on a topic page. This object is available in API version 29.0 and later.

TopicLocalization—Beta

Represents the translated version of a topic name. Topic localization applies only to navigational and featured topics in communities. This object is available in API version 33.0 and later.

TopicUserEvent

Represents an action (such as comment, post, like, or share) made by a user on a topic. This object is available in API version 42.0 and later.

TwoFactorInfo

Stores a user's secret for two-factor operations. Use this object when customizing two-factor authentication in your organization. This object is available in API version 32.0 and later.

TwoFactorMethodsInfo

Stores information about which identity verification methods a user has registered. This object is available in API version 37.0 and later.

TwoFactorTempCode

Stores information about a user's temporary identity verification code. This object is available in API version 37.0 and later.

UndecidedEventRelation

Represents invitees with the status `Not Responded` for a given event. This object is available in API versions 29.0 and later.

User

Represents a user in your organization.

UserAccountTeamMember

Represents a User on the default account team of another User.

UserAppInfo

Stores the last Lightning app logged in to. This object is available in API version 38.0 and later.

UserAppMenuCustomization

Represents an individual user's settings for items in the app menu or App Launcher. This object is available in API version 35.0 and later.

UserAppMenuCustomizationShare

Represents a sharing entry on a UserAppMenuCustomization record. This object is available in API version 35.0 and later.

UserAppMenuItem

Represents the organization-wide settings for items in the app menu or App Launcher that the requesting user has access to in Setup. This object is available in API version 35.0 and later.

UserConfigTransferButton

Represents the association between a Live Agent configuration and a live chat button. This association allows users associated with a specific configuration to transfer chats to a button queue.

UserConfigTransferSkill

Represents the association between a Live Agent configuration and a skill. This association allows users associated with a specific configuration to transfer chats to agents who have that skill.

UserCustomBadge

Represents a custom badge for a user. This object is available in API version 38.0 and later.

UserCustomBadgeLocalization

Represents the translated version of a custom badge for a user. This object is available in API version 38.0 and later.

UserDevice

Represents information unique to a device. Available in API version 43.0 and later.

UserDeviceApplication

Represents information on applications installed on a device that is accessing Salesforce. Available in API version 43.0 and later.

UserFeed

Represents a single feed item in the feed displayed on a Chatter user profile feed. A user profile feed shows changes to a user record for fields that are tracked in feeds, and posts and comments about the record. This object is available in API version 18.0 and later.

UserLicense

Represents a user license in your organization. A user license entitles a user to specific functionality and determines the profiles and permission sets available to the user.

UserListView

Represents the customizations a user made to a list view. This object is available in API version 32.0 and later.

UserListViewCriterion

Represents the criterion for a user's customized list view. The criterion consists of the filters or sort order a user added to a list view for the Salesforce Mobile app. This object is available in API version 32.0 and later.

UserLogin

Represents the settings that affect a user's ability to log into an organization. To access this object, you need the `UserPermissions.ManageUsers` permission. This object is available in API version 29.0 and later.

UserMembershipSharingRule

Represents the rules for sharing user records from a source group to a target group. A user record contains details about a user. Users who are members of the source group can be shared with members of the target group. The source and target groups can be based on roles, portal roles, public groups, or territories. This object is available in API version 26.0 and later.

UserPackageLicense

Represents a license for an installed managed package, assigned to a specific user. This object is available in API version 31.0 and later.

UserPermissionAccess

Represents the permissions accessibility for a current user. Available in API version 41.0 and later.

UserPreference

Represents a functional preference for a specific user in your organization.

UserProfile

Represents a Chatter user profile.

UserProfileFeed

Represents a user profile feed, which tracks all actions by a user on records that can be tracked in a feed. This feed is displayed on the user profile page.

UserProvAccount

Represents information that links a Salesforce user account with an account in a third-party (target) system, such as Google, for users of connected apps with Salesforce user provisioning enabled. This object is available in API version 33.0 and later.

UserProvAccountStaging

Temporarily stores user account information while a user completes the User Provisioning Wizard. This information that is stored in the UserProvAccount object when you click the button to collect and analyze accounts on the target system.

UserProvMockTarget

Represents an entity for testing user data before committing the data to a third-party system for user provisioning.

UserProvisioningConfig

Represents information for a flow to use during a user provisioning request process, such as the attributes for an update. This object is available in API version 34.0 and later.

UserProvisioningLog

Represents messages generated during the process of provisioning users for third-party applications. This object is available in API version 33.0 and later.

UserProvisioningRequest

Represents an individual provisioning request to create, update, or delete a single user account in a third-party service system (or another Salesforce organization). This object is available in API version 33.0 and later.

UserProvisioningRequestOwnerSharingRule

Represents a rule for sharing a UserProvisioningRequest object with users other than the owner. This object is available in API version 34.0 and later.

UserProvisioningRequestShare

Represents a sharing entry on a UserProvisioningRequest record. This object is available in API version 34.0 and later.

UserRecordAccess

Represents a user's access to a set of records. This object is read only and is available in API version 24.0 and later.

UserRole

Represents a user role in your organization.

UserServicePresence

Represents a presence user's real-time presence status. This object is available in API version 32.0 and later.

UserShare

Represents a sharing entry on a user record. This object is available in API version 26.0 and later.

UserTeamMember

Represents a single User on the default opportunity team of another User.

UserTerritory

Represents a User who has been assigned to a Territory.

UserTerritory2Association

Represents an association (by assignment) between a territory and a user record. Available only if Enterprise Territory Management has been enabled for your organization.

VerificationHistory

Represents the past six months of your org users' attempts to verify their identity. This object is available in API version 36.0 and later.

VisualforceAccessMetrics

Represents summary statistics for Visualforce pages.

VoiceCall

Represents a Lightning Dialer phone call.

VoiceCallList

Represents a prioritized list of numbers to call.

VoiceCallListItem

Represents a single phone number in a prioritized call list.

VoiceCallListShare

Represents a sharing entry on a VoiceCallList.

VoiceCallShare

Represents a sharing entry on a VoiceCall object.

VoiceCoaching

Represents a call that is using call monitoring.

VoiceCoachingShare

Represents a sharing entry on a VoiceCoaching record.

VoiceLocalPresenceNumber

Represents a phone number with the same area code as the person who's being called.

VoiceMailContent

Represents a voicemail message left by a caller to the context user.

VoiceMailContentShare

Represents a sharing entry on a VoiceMailContent.

VoiceMailGreeting

Represents a custom greeting message that plays upon reaching a user's voicemail. This object is available in API version 41.0 and later.

VoiceMailGreetingShare

Represents a sharing entry on a VoiceMailGreeting. This object is available in API version 41.0 and later.

VoiceMailMessage

Represents a prerecorded voicemail message.

VoiceMailMessageShare

Represents a sharing entry on a VoiceMailMessage.

VoiceUserLine

Represents a user's forwarding phone number.

VoiceUserLineShare

Represents a sharing entry on a user's phone number.

VoiceUserPreferences

Represents the number the user displays when making outbound calls. This object is available in API version 41.0 and later.

VoiceUserPreferencesShare

Represents a sharing entry on a VoiceUserPreferences object. This object is available in API version 41.0 and later.

VoiceVendorInfo

Represents information about the Lightning Dialer provider's vendor.

VoiceVendorLine

Represents a user's phone number reserved with the vendor.

VoiceVendorLineShare

Represents a sharing entry on a vendor's phone number.

Vote

Represents a vote that a user has made on an Idea or a Reply.

WebLink

Represents a custom link to a URL or Scontrol.

WebLinkLocalization

Represents the translated value of the field label for a custom link to a URL or s-control when the Translation Workbench is enabled for your organization.

WorkAccess

Used to grant or restrict user access to give badge definitions. Each badge definition record must have one WorkAccess record.

WorkAccessShare

Used to control Givers of WorkBadgeDefinition records.

WorkBadge

Represents information about who the badge was given to and which badge was given. A WorkBadge record is created for each recipient of a WorkBadgeDefinition.

WorkBadgeDefinition

Represents the attributes of a badge including the badge name, description, and image. Each WorkBadge record must have a lookup to a WorkBadgeDefinition since badge attributes (like badge name) are derived from the WorkBadgeDefinition object.

WorkBadgeDefinitionHistory

Represents the history of changes to the values in the fields of a WorkBadgeDefinition object.

WorkBadgeDefinitionShare

Represents a sharing entry on a WorkBadgeDefinition object.

WorkCoaching

Represents a single coaching relationship between two users. One of the users is defined as the coach and the other is defined as a coachee. WorkCoaching is feed-enabled so there is a private feed available to the coach and coachee.

WorkCoachingFeed

Represents a single feed item in the feed on the detail page for a coaching record.

WorkCoachingHistory

Represents the history of changes to the values in the fields of a WorkCoaching object.

WorkCoachingShare

Represents a sharing entry on a WorkCoaching object.

WorkFeedback

Represents the answer to a question that a person was asked via a feedback request. Also used to store offered feedback without linking it to a particular question.

WorkFeedbackHistory

Represents the history of changes to the values in the fields of a WorkFeedback object. Access is read-only.

WorkFeedbackQuestion

Represents a free-form text type or multiple choice question within a set of questions.

WorkFeedbackQuestionHistory

Represents the history of changes to the values in the fields of a WorkFeedbackQuestion.

WorkFeedbackQuestionSet

Represents a set of questions being asked. The question set is used to link all the individual requests where different recipients were asked the same set of questions on the same subject.

WorkFeedbackQuestionSetHistory

Represents the history of changes to the values in the fields of a WorkFeedbackQuestionSet object. Access is read-only.

WorkFeedbackQuestionSetShare

Represents a sharing entry on a WorkFeedbackQuestionSet.

WorkFeedbackQuestionShare

Represents a sharing entry on a WorkFeedbackQuestion.

WorkFeedbackRequest

Represents a single feedback request on a subject or topic (question) to a single recipient in the feedback application. In the case of offered feedback, WorkFeedbackRequest represents feedback that is offered about a subject. In the performance application, WorkFeedbackRequest represents a request for feedback on a set of questions from a question set, on a subject—for the recipient to complete and submit.

WorkFeedbackRequestFeed

Represents a single feed item in the feed displayed on the feedback request detail page.

WorkFeedbackRequestHistory

Represents the history of changes to the values in the fields of a WorkFeedbackRequest.

WorkFeedbackRequestShare

Represents a sharing entry on a WorkFeedbackRequest.

WorkFeedbackShare

Represents a sharing entry on a WorkFeedback object.

WorkGoal

Represents the components of a goal, such as its description and associated metrics. This object has been deprecated as of API version 35.0. Use the Goal object to query information about Work.com goals.

WorkGoalCollaborator

Represents collaborators on a WorkGoal object. This doesn't include WorkGoal followers, which is handled by Chatter Feed Follow functionality. This object has been deprecated as of API version 35.0. Use the Goal object to query information about Work.com goals.

WorkGoalCollaboratorHistory

Represents the history of changes to the values in the fields in a WorkGoalCollaborator object. Access is read-only.

WorkGoalFeed

Represents a single feed item in the feed displayed on the goal page for a Goal record. The goal feed shows changes to a goal for fields that are tracked in feeds, posts, and comments about the goal, and updates on metrics. This object has been deprecated as of API version 35.0. Use the GoalFeed object to query information about feed items for Work.com goals.

WorkGoalHistory

Represents the history of changes to the values in the fields of a WorkGoal. Access is read-only. This object has been deprecated as of API version 35.0. Use the GoalHistory object to query historical information for Work.com goals.

WorkGoalLink

Represents the relationship between two goals (many to many relationship). This object has been deprecated as of API version 35.0. Use the GoalLink object to query information about the relationship between two Work.com goals.

WorkGoalShare

Represents a sharing entry on a WorkGoal object. This object has been deprecated as of API version 35.0. Use the GoalShare object to query information about sharing for Work.com goals.

WorkOrder

Represents field service work to be performed for a customer. This object is available in API version 36.0 and later.

WorkOrderFeed

Represents a single feed item on a work order record detail page. This object is available in API version 36.0 and later.

WorkOrderHistory

Represents the history of changes made to tracked fields on a work order. This object is available in API version 36.0 and later.

WorkOrderLineItem

Represents a subtask on a work order in field service. This object is available in API version 36.0 and later.

WorkOrderLineItemFeed

Represents a single feed item on a work order line item record detail page. This object is available in API version 36.0 and later.

WorkOrderLineItemHistory

Represents the history of changes made to tracked fields on a work order line item. This object is available in API version 36.0 and later.

WorkOrderLineItemStatus

Represents a possible status of a work order line item in field service.

WorkOrderShare

Represents a sharing entry on a work order. This object is available in API version 36.0 and later.

WorkOrderStatus

Represents a possible status of a work order in field service.

WorkPerformanceCycle

Represents feedback that is gathered to assess the performance of a specific set of employees.

WorkPerformanceCycleFeed

Represents a single feed item in the feed that is displayed on a Work.com Performance detail page.

WorkPerformanceCycleHistory

Represents the history of changes to the values in the fields of a WorkPerformanceCycle object.

WorkPerformanceCycleShare

Represents a sharing entry on a WorkPerformanceCycle object.

WorkReward

Used to store reward codes tied to a Reward Fund. Reward Funds must have at least one WorkReward record.

WorkRewardFund

Represents a Reward Fund and describes the Reward Fund attributes.

WorkRewardFundHistory

Represents the history of changes to the values in the fields of a WorkRewardFund object.

WorkRewardFundShare

Share records for WorkRewardFund.

WorkRewardFundType

Represents the type of WorkRewardFund object.

WorkRewardFundTypeHistory

Represents the history of changes to the values in the fields of a WorkRewardFundType object.

WorkRewardFundTypeShare

Represents a sharing entry on a WorkRewardFundType.

WorkRewardHistory

Represents the history of changes to the fields of a WorkReward.

WorkRewardShare

Share records for WorkReward object.

WorkThanks

Represents the source and message of a thanks post.

WorkThanksShare

Share records for WorkThanks object.

WorkType

Represents a type of work to be performed. Work types are templates that can be applied to work order or work order line items. This object is available in API version 38.0 and later.

WorkTypeFeed

Represents a single feed item on a work type record detail page. This object is available in API version 38.0 and later.

WorkTypeHistory

Represents the history of changes made to tracked fields on a work type. This object is available in API version 38.0 and later.

WorkTypeOwnerSharingRule

Represents the rules for sharing a work type with user records other than the owner or anyone above the owner in the role hierarchy.

WorkTypeShare

Represents a sharing entry on a work type.

AcceptedEventRelation

Represents invitees with the status `Accepted` for a given event.

This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EventId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
`RelationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.

Field Name	Details
RespondedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the most recent date and time when the invitee accepted an invitation to the event.
Response	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have accepted an invitation to an event

```
SELECT eventId, type, response FROM AcceptedEventRelation WHERE eventid='00UTD000000ZH5LA'
```

SEE ALSO:

DeclinedEventRelation

UndecidedEventRelation

Account

Represents an individual account, which is an organization or person involved with your business (such as customers, competitors, and partners).

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can access their own accounts and any account shared with them.

Fields

Field Name	Details
`AccountNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Account number assigned to this account (not the unique, system-generated ID assigned during creation). Maximum size is 40 characters.
`AccountSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the account record. For example, *`Advertisement`*, *`Data.com`*, or *`Trade Show`*. The source is selected from a picklist of available values, which are set by an administrator. Each picklist value can have up to 40 characters.
`AnnualRevenue`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Estimated annual revenue of the account.
`BillingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
`BillingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Details for the billing address of this account. Maximum size is 40 characters.
`BillingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
`BillingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the account's billing address.
`BillingGeocodeAccuracy`	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the billing address. See Compound Field Considerations and Limitations for details on geolocation compound fields.
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.

Field Name	Details
BillingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 20 characters.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
BillingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the account's billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address of this account.
ChannelProgramName	**Type** string **Properties** Group, Nillable **Description** Read only. Name of the channel program the account has enrolled. Note: If this account has enrolled more than one channel program, the oldest channel program name will be displayed. .
ChannelProgramLevelName	**Type** string

Field Name	Details
	Properties Group, Nillable **Description** Read only. Name of the channel program level the account has enrolled. Note: If this account has enrolled more than one channel program level, the oldest channel program name will be displayed.
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record's clean status as compared with Data.com. Values are: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`. Several values for `CleanStatus` display with different labels on the account record detail page. • `Matched` displays as `In Sync` • `Acknowledged` displays as `Reviewed` • `Pending` displays as `Not Compared`
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`Description`	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** Text description of the account. Limited to 32,000 KB.
`DunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking. Maximum size is 9 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Fax number for the account.
`Industry`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An industry associated with this account. Maximum size is 40 characters.
`IsCustomerPortal`	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the account has at least one contact enabled to use the organization's Customer Portal (`true`) or not (`false`). This field is available if Customer Portal is enabled OR Communities is enabled and you have Customer Portal licenses.

Field Name	Details
	If you change this field's value from `true` to `false`, you can disable up to 100 Customer Portal users associated with the account and permanently delete all of the account's Customer Portal roles and groups. You can't restore deleted Customer Portal roles and groups. This field can be updated in API version 16.0 and later. Tip: We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the account has at least one contact enabled to use the organization's partner portal (`true`) or not (`false`). This field is available if partner relationship management (partner portal) is enabled OR Communities is enabled and you have partner portal licenses. If you change this field's value from `true` to `false`, you can disable up to 15 partner portal users associated with the account and permanently delete all of the account's partner portal roles and groups. You can't restore deleted partner portal roles and groups. Disabling a partner portal user in the Salesforce user interface or the API does not change this field's value from `true` to `false`. Even if this field's value is `false`, you can enable a contact on an account as a partner portal user via the API. This field can be updated in API version 16.0 and later. Tip: We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
`IsPersonAccount`	**Type** boolean **Properties** Defaulted on create, Filter

Field Name	Details
	Description Read only. Label is **Is Person Account**. Indicates whether this account has a record type of Person Account (`true`) or not (`false`).
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the ID of a company in Data.com. If an account has a value in this field, it means that the account was imported from Data.com. If the field value is `null`, the account was not imported from Data.com. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. This field is available on business accounts, not person accounts. Important: The `Jigsaw` field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify the value in the `Jigsaw` field.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
`MasterRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this object was deleted as the result of a merge, this field contains the ID of the record that was kept. If this object was deleted for any other reason, or has not been deleted, the value is `null`.
`NaicsCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments into industries, according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Maximum size is 8 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`NaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on its NAICS code. Maximum size is 120 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Label is **Account Name**. Name of the account. Maximum size is 255 characters. If the account has a record type of Person Account: • This value is the concatenation of the `FirstName`, `MiddleName`, `LastName`, and `Suffix` of the associated person contact. • You can't modify this value.

Field Name	Details
NumberOfEmployees	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Label is **Employees**. Number of employees working at the company represented by this account. Maximum size is eight digits.
OperatingHoursId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The operating hours associated with the account. Available only if Field Service Lightning is enabled.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns this account. Default value is the user logged in to the API to perform the create. If you have set up account teams in your organization, updating this field has different consequences depending on your version of the API: • For API version 12.0 and later, sharing records are kept, as they are for all objects. • For API version before 12.0, sharing records are deleted. • For API version 16.0 and later, users must have the "Transfer Record" permission in order to update (transfer) account ownership using this field.
Ownership	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Ownership type for the account, for example Private, Public, or Subsidiary.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the parent object, if any.
PersonIndividualId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this person's account. This field is available if you enabled Data Protection and Privacy in Setup. Available in API version 42.0 and later.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number for this account. Maximum size is 40 characters.
PhotoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Path to be combined with the URL of a Salesforce instance (for example, https://*yourInstance*.salesforce.com/) to generate a URL to request the social network profile image associated with the account. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the account. Blank if Social Accounts and Contacts isn't enabled for the organization or if Social Accounts and Contacts is disabled for the requesting user.
Rating	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account's prospect rating, for example Hot, Warm, or Cold.
RecordTypeId	**Type** reference

Field Name	Details
	Properties Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`Salutation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Honorific added to the name for use in letters, etc.
`ShippingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
`ShippingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. City maximum size is 40 characters
`ShippingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. Country maximum size is 80 characters.
`ShippingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the account's shipping address.

Field Name	Details
ShippingGeocodeAccuracy	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the shipping address. See Compound Field Considerations and Limitations for details on geolocation compound fields.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. Postal code maximum size is 20 characters.
ShippingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details of the shipping address for this account. State maximum size is 80 characters.
ShippingStateCode	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the account's shipping address.
`ShippingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address of the shipping address for this account. Maximum of 255 characters.
`Sic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Standard Industrial Classification code of the company's main business categorization, for example, 57340 for Electronics. Maximum of 20 characters. This field is available on business accounts, not person accounts.
`SicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on its SIC code. Maximum length is 80 characters. This field is available on business accounts, not person accounts.
`Site`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the account's location, for example `Headquarters` or `London`. Label is **Account Site**. Maximum of 80 characters.
`TickerSymbol`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The stock market symbol for this account. Maximum of 20 characters. This field is available on business accounts, not person accounts.
`Tradestyle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name, different from its legal name, that an organization may use for conducting business. Similar to “Doing business as” or “DBA”. Maximum length is 255 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of account, for example, Customer, Competitor, or Partner.
`Website`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The website of this account. Maximum of 255 characters.
`YearStarted`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when an organization was legally established. Maximum length is 4 characters. This field is available on business accounts, not person accounts. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.

IsPersonAccount Fields

These fields are the subset of person account fields that are contained in the child person contact record of each person account. If the `IsPersonAccount` field has the value `false`, the following fields have a null value and can't be modified. If `true`, the fields can be modified.

Person accounts are not enabled by default.

Field Name	Details
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** First name of the person for a person account. Maximum size is 40 characters.
`LastName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Last name of the person for a person account. Required if the record type is a person account record type. Maximum size is 80 characters.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Middle name of the person for a person account. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.
`PersonAssistantName`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The person account's assistant name. Label is **Assistant**. Maximum size is 40 characters.
`PersonAssistantPhone`	**Type** phone **Properties** Create, Filter, Nillable, Update

Field Name	Details
	Description The person account's assistant phone. Label is **Asst. Phone**. Maximum size is 40 characters.

PersonBirthDate	**Type**
	date
	Properties
	Create, Filter, Nillable, Update
	Description
	The assistant name. Label is **Birthdate**.
	Note: The year portion of the `PersonBirthDate` field is ignored in filter criteria, including report filters, list view filters, and SOQL queries. For example, the following SOQL query returns person accounts with birthdays later in the year than today:
	`SELECT FirstName, LastName, PersonBirthDate`
	`FROM Account`
	`WHERE Birthdate > TODAY`

PersonContactId	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID for the contact associated with this person account. Label is **Contact ID**.
PersonDepartment	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The department. Label is **Department**. Maximum size is 80 characters.
PersonEmail	**Type** email **Properties** Create, Filter, Nillable, Update **Description** Email address for thisperson account. Label is **Email**.
PersonEmailBouncedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Update

Field Name	Details
	Description If bounce management is activated and an email sent to the person account bounces, the date and time the bounce occurred.
`PersonEmailBouncedReason`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** If bounce management is activated and an email sent to the person account bounces, the reason the bounce occurred
`PersonHasOptedOutOfEmail`	**Type** boolean **Properties** Create, Filter, Nillable, Update **Description** Indicates whether the person account has opted out of email (`true`) or not (`false`). Label is **Email Opt Out**.
`PersonHomePhone`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The home phone number for this person account. Label is **Home Phone**.
`PersonLeadSource`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** The person account's lead source. Label is **Lead Source**.
`PersonMailingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the person account mailing address. Read-only. See Address Compound Fields for details on compound address fields.

Field Name	Details
PersonMailingCity	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details about the person account's mailing city. Labels are **Mailing City**, **Mailing Country**, **Postal Code**, and **State**. Maximum size for city and country is 40 characters. Maximum size for postal code and state is 20 characters.
PersonMailingGeocodeAccuracy	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the person's mailing address. See Compound Field Considerations and Limitations for details on geolocation compound fields.
PersonMailingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `PersonMailingLongitude` to specify the precise geolocation of a person account's mailing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
PersonMailingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `PersonMailingLatitude` to specify the precise geolocation of a person account's mailing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations on page 42 for details on geolocation compound fields.
PersonMailingStreet	**Type** textarea **Properties** Create, Filter, Nillable, Update

Field Name	Details
	Description The mailing street address for this person account. Label is **Mailing Street**. Maximum size is 255 characters.
PersonMobilePhone	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The mobile phone number for this person account. Label is **Mobile**.
• PersonOtherCity • PersonOtherCountry • PersonOtherPostalCode • PersonOtherState	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details about the alternate address for this person account. Labels are **Other City**, **Other Country**, **Other Zip/Postal Code**, and **Other State**.
• PersonOtherCountryCode • PersonOtherStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country or state code for the alternate address of the person account.
PersonOtherLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `PersonOtherLongitude` to specify the precise geolocation of a person account's alternate address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
PersonOtherLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `PersonOtherLatitude` to specify the precise geolocation of a person account's alternate address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields.
`PersonOtherPhone`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The alternate phone number for this person account. Label is **Other Phone**.
`PersonOtherStreet`	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** The person account's alternate street address. Label is **Other Street**.
`PersonTitle`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The person account's title. Label is **Title**. Maximum size is 80 characters.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name suffix of the person for a person account. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.

Note: If you are importing Account data into Salesforce and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use this object to query and manage accounts in your organization. Client applications can create, update, delete, or query Attachment records associated with an account via the API.

Client applications can also create or update account objects by converting a Lead via the `convertLead()` call.

If the values in the IsPersonAccount Fields are not null, you can't change `IsPersonAccount` to `false`, or an error occurs.

SEE ALSO:

AccountShare
AccountTeamMember
Person Account Record Types
AccountHistory

AccountBrand

Represents the brand details of a Partner Account. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObject()`, `getDeleted()`, `getUpdated()` `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the Account. This number is unique within your organization.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The street address.

Field	Details
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city.
CompanyName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the company associated with the account brand.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where the account is physically located.
Email	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address associated with the account.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist Sort, Update **Description** Stores data for accurate geocoded location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Most recent date referenced.

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Most recent date viewed.
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used in conjunction with Longitudeto specify the precise geolocation of an address.
LogoId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the logo.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used in conjunction with Latitudeto specify the precise geolocation of an address.
Name	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. Name of the account.
OwnerId	**Type** reference **Properties** Create, Defaulted on create Filter, Group, Sort, Update **Description** Required. ID of the Owner.

Field	Details
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Phone number.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the user's IP address is physically located.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address state.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address street.
Website	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Website for the Account Brand.

AccountBrandShare

Represents a sharing entry on an account brand record. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the account brand record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the account brand record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the account brand record.

AccountContactRelation

Represents a relationship between a contact and one or more accounts.

This object is available in API version 37.0. The AccountContactRelation object supports person accounts. That means that a person account can be either a related contact on a business account or a related account on a contact. A person account can also be related to another person account as either a related contact or related account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Fields

Field Name	Details
`AccountContactRelationshipCurrency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the account that is related to the contact. Field can't be modified when updating existing account-contact relationship records.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the contact that is related to the account. Field can't be modified when updating existing account-contact relationship records.
`EndDate`	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The date a relationship between a contact and account ended. Use with the `Start Date` to keep a history of the relationship.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether relationship is active (`true`) or not (`false`).
`IsDirect`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the account associated with the contact is the contact's primary account (`true`) or not (`false`).
`Roles`	**Type** multipicklist **Properties** Create, Filter, Nillable, Update **Description** The contact's participating role in the account. Values are `Business User`, `Decision Maker`, `Economic Buyer`, `Economic Decision Maker`, `Evaluator`, `Executive Sponsor`, `Influencer`, `Technical Buyer`, and `Other`.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date a relationship between a contact and account began. Use with the `End Date` to keep a history of the relationship.

Usage

Use this object to associate a single contact record to multiple account records so you can easily track the relationships between the people and businesses they work with.

AccountCleanInfo

Stores the metadata Data.com Clean uses to determine an account record's clean status. AccountCleanInfo helps you automate the cleaning or related processing of account records.

Account Clean Info provides a snapshot of the data in your Salesforce account record and its matched Data.com record at the time the Salesforce record was cleaned.

Account Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentState` field. If the `IsDifferentState` field's value is `False`, that means the `State` field value is *the same* on the Salesforce account record and its matched Data.com record.

AccountCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the account record.
- `IsDifferent` indicates whether or not a field on the account record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the account record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the account record is in a `Reviewed` state, which means that the value was reviewed but not accepted.

Their individual bits are defined here.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique, system-generated ID assigned when the account record was created.
`AccountSite`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Information about the account’s location, such as single location, headquarters, or branch.
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`AnnualRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated annual revenue of the account.
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
`CleanedByJob`	**Type** boolean **Properties** Filter **Description** Indicates whether the account record was cleaned by a Data.com Clean job (`true`) or not (`false`).
`CleanedByUser`	**Type** boolean **Properties** Filter **Description** Indicates whether the account record was cleaned by a Salesforce user (`true`) or not (`false`).

Field Name	Details
CompanyName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the company.
CompanyStatusDataDotCom	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the company per Data.com. Values are: `Company is In Business per Data.com` or `Company is Out of Business per Data.com.`
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
DandBCompanyDunsNumber	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The D-U-N-S Number on the D&B Company record (if any) that is linked to the account.
DataDotComId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the company.
Description	**Type** textarea **Properties** Nillable

Field Name	Details
	Description A description of the account.
DunsNumber	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
DunsRightMatchConfidence	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The account's DUNSRight confidence code.
DunsRightMatchGrade	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The account's DUNSRight match grade.
Fax	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The account's fax number.
Industry	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The industry the account belongs to.

Field Name	Details
`IsDifferentAccountSite`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `AccountSite` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentAnnualRevenue`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `AnnualRevenue` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCity`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyName`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `AccountName` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountry`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountryCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `DandBCompanyID` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDescription`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Description` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `DunsNumber` field value is different from the D-U-N-S Number on its matched Data.com record (`true`) or not (`false`).
`IsDifferentFax`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Fax` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentIndustry`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `Industry` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNaicsCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `NaicsCode` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNaicsDescription`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `NaicsDescription` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNumberOfEmployees`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `NumberOf Employees` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentOwnership`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Ownership` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `PostalCode` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentSic`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Sic` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentSicDescription`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `SicDescription` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTickerSymbol`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `TickerSymbol` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTradestyle`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Tradestyle` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentWebsite`	**Type** boolean **Properties** Filter **Description** Indicates whether the account's `Website` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentYearStarted`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the account's `YearStarted` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAccountSite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `AccountSite` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAnnualRevenue`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `AnnualRevenue` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `CompanyName` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongDescription`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Description` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `DunsNumber` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongFax`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Fax` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongIndustry`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Industry` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNaicsCode`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsCode` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNaicsDescription`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `NaicsDescription` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNumberOfEmployees`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NumberOfEmployees` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongOwnership`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Ownership` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongSic`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Sic` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongSicDescription`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `SicDescription` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTickerSymbol`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `TickerSymbol` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTradestyle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Tradestyle` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongWebsite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Website` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongYearStarted`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `YearStarted` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Indicates whether the account has been reported to Data.com as *Inactive* (true) or not (false).
IsReviewedAccountSite	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's AccountSite field value is in a Reviewed state (true) or not (false).
IsReviewedAddress	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's Address field value is in a Reviewed state (true) or not (false).
IsReviewedAnnualRevenue	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's AnnualRevenue field value is in a Reviewed state (true) or not (false).
IsReviewedCompanyName	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's CompanyName field value is in a Reviewed state (true) or not (false).
IsReviewedDandBCompanyDunsNumber	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `DandBCompanyID` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Description` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `DunsNumber` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedFax`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Fax` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedIndustry`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Industry` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedNaicsCode`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `NaicsCode` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedNaicsDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NaicsDescription` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedNumberOfEmployees`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `NumberOfEmployees` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedOwnership`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Ownership` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedSic`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `Sic` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedSicDescription`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `SicDescription` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTickerSymbol`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `TickerSymbol` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTradestyle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Tradestyle` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedWebsite`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the account's `Website` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedYearStarted`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the account's `YearStarted` field value is in a `Reviewed` state (`true`) or not (`false`).
`LastMatchedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date the account record was last matched and linked to a Data.com record.
`LastStatusChangedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
`LastStatusChangedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.
`Latitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
`Longitude`	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.

Field Name	Details
NaicsCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments into industries, according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.
NaicsDescription	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A brief description of an organization's line of business, based on its NAICS code.
Name	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Account Clean Info Name**. The name of the account. Maximum size is 255 characters.
NumberOfEmployees	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of employees working at the account.
Ownership	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Ownership type for the account, for example Private, Public, or Subsidiary.
Phone	**Type** phone

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The phone number for the account.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
Sic	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Standard Industrial Classification code of the company's main business categorization, for example, 57340 for Electronics.
SicDescription	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A brief description of an organization's line of business, based on its SIC code.
State	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.
Street	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the account.

Field Name	Details
`TickerSymbol`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The stock market symbol for the account.
`Tradestyle`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A name, different from its legal name, that an organization can use for conducting business. Similar to “Doing business as” (DBA).
`Website`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The website of the account.
`YearStarted`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The year the company was established or the year when current ownership or management assumed control of the company.

Usage

Administrators can modify a limited set of AccountCleanInfo fields from the Account Clean Info page.

Developers can create triggers that read the Account Clean Info fields to help automate the cleaning or related processing of account records. For example, you might create a trigger that reads the `Clean Status` field on the Account object. If an account record's `Clean Status` field value is `Different` but the record has no `Billing Street` value, the trigger could update the record's status to `Not Compared`.

Create triggers that read AccountCleanInfo fields to help automate the cleaning or related processing of account records. For example:

- Keep account records' status `InSync` if the only difference from matched records is the `Phone` format (for example, *(415) 353-8000* on the account record versus *415 353 8000* on the matched Data.com record).

```
trigger AccountPhoneTrigger on Account (before update) {

   for (Account account: Trigger.new) {
       Account oldAccount = Trigger.oldMap.get(account.ID);
       if (account.CleanStatus == 'Different') {
           List <AccountCleanInfo> cleanInfo = [Select Id, IsDifferentPhone,
IsReviewedPhone, Phone from AccountCleanInfo where AccountId = :account.Id];
           if (cleanInfo.size() > 0 && cleanInfo[0].IsDifferentPhone &&
cleanInfo[0].Phone.StartsWith('+')) {
               // if Data.com phone number is marked Different but starts with '+',
ignore this
               // and set the status to "Reviewed"
               AccountCleanInfo cleanInfoToUpdate = new AccountCleanInfo();
               cleanInfoToUpdate.Id = cleanInfo[0].Id;
               cleanInfoToUpdate.IsReviewedPhone = true;
               update cleanInfoToUpdate;
               account.CleanStatus = 'Reviewed';
           }
       }
   }
}
```

- Create a customized set of `Industry` field values for accounts. Use triggers to map values from fields on imported or cleaned records onto a standard set of values.
- Read the `CleanStatus` field value on the Account object. If that value is `Different`, but a Salesforce record has no street address value, update the record's status to `Not Compared`.

AccountContactRole

Represents the role that a Contact plays on an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** Required. ID of the Account.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Contact associated with this account.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the Contact plays the primary role on the Account (`true`) or not (`false`). Note that each account has only one primary contact role. Label is **Primary**. Default value is `false`.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the role played by the Contact on this Account, such as Decision Maker, Approver, Buyer, and so on. Must be unique—there can't be multiple records in which the `AccountId`, `ContactId`, and `Role` values are identical. Different contacts can play the same role on the same account. A contact can play different roles on the same account.

Usage

Use this object to define the role that a Contact plays on a given Account within the context of a specific Opportunity.

SEE ALSO:

Account

Contact

AccountFeed

Represents a single feed item on an account record detail page. This object is available in API version 18.0 and later.

An account feed shows changes to an account record for fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to accounts in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Account object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of AccountFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort

Field	Details
	Description The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn’t updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn’t counted until it's approved by an admin or a person with “CanApproveFeedPostAndComment” or “ModifyAllData” permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can’t be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string

Field	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.

Field	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
isRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field	Details
Visibility	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for an account record.

SEE ALSO:

Account

EntitySubscription

NewsFeed

UserProfileFeed

AccountHistory

Represents the history of changes to the values in the fields of an account. This object is available in versions 11.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`AccountId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Account. Label is **Account ID**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to an account.

This object respects field level security on the parent object.

SEE ALSO:

Account

AccountOwnerSharingRule

Represents the rules for sharing an account with a User other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit` • `All` (This value isn't valid for creating or updating.)
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group for all child cases. The possible values are: • `None`

Field	Details
	• `Read` • `Edit`
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A value that represents the type of access granted to the target Group, UserRole, or User for any associated contacts. The possible values are: • `None` • `Read` • `Edit` Note: When `DefaultContactAccess` is set to `Controlled by Parent`, you can't create or update this field.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. An Account owned by a User in the source Group triggers the rule to give access.
OpportunityAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group for any associated Opportunity. The possible values are: • None • Read • Edit
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for accounts. General sharing and territory management-related sharing use this object. For example, the following code creates an account owner sharing rule between two public groups, which can also contain portal users.

```
AccountOwnerSharingRule rule = new AccountOwnerSharingRule();
rule.setName("RuleName"); // Set the sharing rule name
rule.setDeveloperName("RuleDeveloperName"); // Set the sharing rule developer name
```

```
rule.setGroupId("00Gx00000000000"); // Set the group of users to share records from
rule.setUserOrGroupId("00Gx00000000001"); // Set the group of users to share records to
rule.setAccountAccessLevel("Edit");
rule.setOpportunityAccessLevel("Read");
rule.setCaseAccessLevel("None");
connection.create(rule);
```

SEE ALSO:

Account

AccountShare

Metadata API Developer Guide: SharingRules

AccountPartner

This read-only object represents a partner relationship between two Account objects. It is automatically created when a Partner object is created for a partner relationship between two accounts.

Note: This object is completely distinct and independent of Account records that have been enabled for the partner portal.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountFromId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the main Account in the partner relationship.
`AccountToId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, **Description** ID of the partner Account in the partner relationship.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the AccountPartner is the main account's primary partner (`true`) or not (`false`).
`OpportunityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the opportunity in a partner relationship with the related account.
`Role`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The UserRole that the partner Account has on the main Account. For example, `Consultant` or `Distributor`.

Creating an Account-Account Partner Relationship

When you create a partner relationship between two accounts (when you create a Partner object and specify the `AccountFromId`), the API automatically creates two AccountPartner objects, one for the forward relationship and one for the reverse. For example, if you create a Partner object with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`, the API automatically creates two AccountPartner objects:

- The forward relationship AccountPartner with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`.
- The reverse relationship AccountPartner with "Acme Consulting" as the `AccountFromId` and "Acme, Inc." as the `AccountToId`.
- The value of the `Role` field in the reverse relationship AccountPartner is set to the PartnerRole object `ReverseRole` value associated with the value of the `Role` field in the forward relationship AccountPartner.

This mapping allows the API to manage the objects and their relationship efficiently.

SEE ALSO:

Partner

OpportunityPartner

AccountShare

Represents a sharing entry on an Account.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Account. The possible values are: • `Read` • `Edit` • `All` (This value isn't valid for create or update calls.) This field must be set to an access level that is at least equal to the organization's default Account access level. In addition, either this field, the `OpportunityAccessLevel` field, or the `CaseAccessLevel` field must be set higher than the organization's default access level.
`AccountId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the Account associated with this sharing entry. This field can't be updated.
`CaseAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to cases associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default `CaseAccessLevel`. This field can't be updated via the API if the `AccountAccessLevel` field is set to `All`. You can't update this field for the associated account owner via the API. You must update the account owner's `CaseAccessLevel` via the Salesforce user interface.
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Level of access that the User or Group has to contacts associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default `ContactAccessLevel`. This field can't be updated via the API if the `ContactAccessLevel` field is set to "Controlled by Parent." You can't update this field for the associated account owner using the API. You must update the account owner's `ContactAccessLevel` via the Salesforce user interface.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field	Details
OpportunityAccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to opportunities associated with the Account. The possible values are: • None • Read • Edit This field must be set to an access level that is at least equal to the organization's default opportunity access level. This field can't be updated via the API if the AccountAccessLevel field is set to All. You can't use the API to update this field for the associated Account owner. You must update the Account owner's opportunityAccessLevel via the Salesforce user interface.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to Manual (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Manual—The User or Group has access because a User with "All" access manually shared the Account with the user or group. • ImplicitParent—The User or Group has access because they're the owner of or have sharing access to records related to the account, such as opportunities, cases, contacts, contracts, or orders. • Owner—The User is the owner of the Account • Team—The User or Group has team access (is an AccountTeamMember). • Rule—The User or Group has access via an Account sharing rule.
UserOrGroupId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Account. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Account records owned by other users.

If you attempt to create an AccountShare record that matches an existing record, the request updates any modified fields and returns the existing record.

For example, the following code finds all accounts owned by a user and manually shares them to a portal user.

```
QueryResult result = conn.query("SELECT Id FROM Account WHERE OwnerId = '005D0000001LPFB'");
// Create a new AccountShare object
List<AccountShare> shares = new ArrayList<AccountShare>();
for (SObject rec : result.getRecords()) {
     AccountShare share = new AccountShare();
    share.setAccountId(rec.getId());
    //Set the portal user Id to share the accounts with
    share.setUserOrGroupId("003D000000QA8Tl");
    share.setAccountAccessLevel("Edit");
    share.setOpportunityAccessLevel("Read");
    share.setCaseAccessLevel("Edit");
    shares.add(share);
}
conn.create(shares.toArray(new AccountShare[shares.size()]));
```

This code shares the accounts that the user owns at the time, but not those accounts that are owned later. For these types of shares, use an owner-based sharing rule, such as AccountOwnerSharingRule.

If an account is shared in multiple ways with a user, you don't always see multiple sharing records. If a user has access to an account for one or more of the following RowCause values, the records in the AccountShare object are compressed into one record with the highest level of access.

- `ImplicitParent`
- `Manual`
- `Owner`

SEE ALSO:

Account

CaseShare

LeadShare

OpportunityShare

AccountTag

Associates a word or short phrase with an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
ItemId	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
Name	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
TagDefinitionId	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
Type	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • Public—The tag can be viewed and manipulated by all users in an organization. • Personal—The tag can be viewed or manipulated only by a user with a matching OwnerId.

Usage

AccountTag stores the relationship between its parent TagDefinition and the Account being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

AccountTeamMember

Represents a User who is a member of an Account team.

See also UserAccountTeamMember, which represents a User who is on the default account team of another user.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available only for Enterprise, Unlimited, and Performance Edition users who have enabled the account team functionality.
- Customer Portal users can't access this object.

Fields

Field Name	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to the Account. The possible values are: • `Read` • `Edit` • `All` This field must be set to an access level that is at least equal to the organization's default Account access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level.
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Account to which this user is a team member. Must be a valid account ID.

Field Name	Details
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to cases associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default case access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`ContactAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to contacts associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default contact access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**. Note: An AccountTeamMember record that is deleted is not moved to the Recycle Bin. A deleted AccountTeamMember record can't be undeleted unless the record was

Field Name	Details
	cascade-deleted when deleting a related Account. For directly deleted AccountTeamMember records, don't use the isDeleted field to detect deleted records in SOQL queries or `queryAll()` calls. Instead, use `getDeleted()`.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Level of access that the User has to opportunities associated with the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default opportunity access level. In addition, the users's `AccountAccessLevel`, `ContactAccessLevel`, `OpportunityAccessLevel`, or `CaseAccessLevel` field must be set higher than the organization's default access level. This field is available in API version 37.0 and later.
`PhotoURL`	**Type** URL **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the users Chatter photo URL. This field is available in API version 37.0 and later.
`TeamMemberRole`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role associated with this team member. One of the valid team member roles defined for your organization. Label is **Team Role**.
`Title`	**Type** string **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the user's title. This field is available in API version 37.0 and later.

Field Name	Details
UserId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of this account team. Must be a valid User ID.

Usage

Use this object to manage the team members of a particular Account and to specify team member roles for those users on that account.

SEE ALSO:

Account

AccountTerritoryAssignmentRule

An account assignment rule that assigns accounts to territories based on account fields. Only available if territory management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
BooleanFilter	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Advanced filter conditions that were specified for the rule in the online application. For example, “(1 AND 2) OR 3.”

Field	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the rule is active (`true`) or inactive (`false`). Via the API, active rules run automatically when new accounts are created and existing accounts are edited. The exception is when the `IsExcludedFromRealign` field on an account is `true`, which prevents account assignment rules from evaluating that account.
IsInherited	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the rule is an inherited rule (`true`) or a local rule (`false`). An inherited rule also acts upon territories below it in the territory hierarchy. A local rule is created at the immediate territory and only impacts the immediate territory.
Name	**Type** string **Properties** Create, Filter, Update **Description** A name for the rule. Limit is 80 characters.
TerritoryId	**Type** reference **Properties** Create, Filter, Update **Description** ID of the territory where accounts that satisfy this rule are assigned.

Usage

A territory will not have any accounts (with the exception of manually assigned accounts) unless at least one account assignment rule is active for the territory.

SEE ALSO:

- AccountTerritoryAssignmentRuleItem
- Territory
- UserTerritory

AccountTerritoryAssignmentRuleItem

A row of selection criteria for an AccountTerritoryAssignmentRule object. Only available if territory management has been enabled for your organization.

AccountTerritoryAssignmentRuleItem can be created or deleted if the `BooleanFilter` field on its corresponding AccountTerritoryAssignmentRule object is a null value.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The standard or custom account field to use as a criteria.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The criteria to apply, such as “equals” or “starts with.”

Field	Details
`RuleID`	**Type** reference **Properties** Create, Filter, Update **Description** ID of the associated AccountTerritoryAssignmentRule.
`SortOrder`	**Type** int **Properties** Create, Filter, Update **Description** The order in which this row is evaluated compared to other AccountTerritoryAssignmentRuleItem objects for the given AccountTerritoryAssignmentRule.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The field value(s) to evaluate, such as `94105` if the `Field` is `Billing Zip/Postal Code`.

Usage

- Both standard and custom account fields can be used as criteria for account assignment rules.
- A territory will not have any accounts (with the exception of manually assigned accounts) unless at least one account assignment rule is active for the territory.

SEE ALSO:

AccountTerritoryAssignmentRule

Territory

UserTerritory

AccountTerritorySharingRule

Represents the rules for sharing an Account within a Territory.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit` • `All`
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target group for all child cases of the account. The possible values are: • `None` • `Read` • `Edit`
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A value that represents the type of access granted to the target group for all related contacts on the account. The possible values are: • `None` • `Read`

Field	Details
	• `Edit` **Note:** This field is read only.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. **Note:** When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Accounts owned by users in the source territory trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.

Field	Details
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target group for all opportunities associated with the account. The possible values are: • `None` • `Read` • `Edit`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the user or group being given access, or, if a territory ID, the users assigned to that territory.

Usage

Use this object to manage the sharing rules for a particular object. General sharing and Territory-related sharing use this object.

SEE ALSO:

Account

AccountShare

ActionLinkGroupTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking on an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. Every action link belongs to an action link group and action links within the group are mutually exclusive. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with the “Customize Application” permission can modify or delete this object.

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The location of the action link group within the feed element. Values are: • `Primary`—The action link group is displayed in the body of the feed element. • `Overflow`—The action link group is displayed in the overflow menu of the feed element.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the action link group template to use in code.
`ExecutionsAllowed`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The number of times an action link can be executed. Values are: • `Once`—An action link can be executed only once across all users. • `OncePerUser`—An action link can be executed only once for each user. • `Unlimited`—An action link can be executed an unlimited number of times by each user. If the action link's `actionType` is `Api` or `ApiAsync`, you can't use this value.
`HoursUntilExpiration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of hours from when the action link group is created until it's removed from associated feed elements and can no longer be executed. The maximum value is 8,760.

Field Name	Details
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the action link group template is published. Action link group templates shouldn't be published until at least one ActionLinkTemplate is associated with it. Once set to `true`, this can't be set back to `false`.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the action link group template.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Usage

Define action link templates in Setup and use `ConnectApi` in Apex or Chatter REST API to instantiate action links from the templates and to post feed elements with the action links.

If you delete a published action link group template, you delete all related action link information which includes deleting all action links that were instantiated using the template from feed items.

ActionLinkTemplate

Action link templates let you reuse action link definitions and package and distribute action links. An action link is a button on a feed element. Clicking an action link can take a user to another Web page, initiate a file download, or invoke an API call to an external server or Salesforce. Use action links to integrate Salesforce and third-party services into the feed. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with the "Customize Application" permission can modify or delete this object.

Fields

Field Name	Details
`ActionLinkGroupTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the ActionLinkGroupTemplate with which this action link template is associated.
`ActionUrl`	**Type** textarea **Properties** Create, Update **Description** The action link URL. For example, a `Ui` action link URL is a Web page. A `Download` action link URL is a link to the file to download. `Ui` and `Download` action link URLs are provided to clients. An `Api` or `ApiAsync` action link URL is a REST resource. `Api` and `ApiAsync` action link URLs aren't provided to clients. Links to Salesforce can be relative. All other links must be absolute and start with `https://`.

Field Name	Details
	Links to resources hosted on Salesforce servers can be relative, starting with a `/`. All other links must be absolute and start with `https://`. This field can contain context variables and binding variables in the form `{!Bindings.`***key***`}`, for example, `https://www.example.com/{!Bindings.itemId}`. Set the binding variable's value when you instantiate the action link group from the template.
`Headers`	**Type** textarea **Properties** Create, Nillable, Update **Description** Template for the HTTP headers sent when corresponding action links are invoked. This field can be used only for `Api` and `ApiAsync` action links. This field can contain context variables and binding variables in the form `{!Bindings.`***key***`}`.
`IsConfirmationRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, a confirmation dialog appears before the action is executed.
`IsGroupDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, action links derived from this template are the default or primary action in their action groups. There can be only one default action per action group.
`Label`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A custom label to display on the action link button. If none of the `LabelKey` values make sense for an action link, use a custom label. Set the `LabelKey` field to `None` and enter a label name in the `Label` field. Action links have four states: new, pending, success, and failed. These strings are appended to the label for each state: • *Label*

Field Name	Details
	• *Label* Pending • *Label* Success • *Label* Failed For example, if the value of `Label` is "Call Home," the values of the four action link states are: Call Home, Call Home Pending, Call Home Success, and Call Home Failed. If `LabelKey` has any value other than `None`, the `Label` field is empty.
`LabelKey`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Key for the set of labels to display for these action link states: new, pending, success, failed. For example, the Approve set contains these labels: Approve, Pending, Approved, Failed. For a complete list of keys and labels, see Action Links Labels in the *Chatter REST API Developer Guide* or the *Apex Developer Guide*. If none of the label key values make sense for an action link, set this field to `None` and enter a custom label name in the `Label` field.
`LinkType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of action link. One of these values: • `Api`—The action link calls a synchronous API at the action URL. Salesforce sets the status to `SuccessfulStatus` or `FailedStatus` based on the HTTP status code returned by your server. • `ApiAsync`—The action link calls an asynchronous API at the action URL. The action remains in a `PendingStatus` state until a third party makes a request to `/connect/action-links/`***`actionLinkId`*** to set the status to `SuccessfulStatus` or `FailedStatus` when the asynchronous operation is complete. • `Download`—The action link downloads a file from the action URL. • `Ui`—The action link takes the user to a web page at the action URL.
`Method`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description HTTP method for the action URL. One of these values: • `HttpDelete`—Returns HTTP 204 on success. Response body or output class is empty. • `HttpGet`—Returns HTTP 200 on success. • `HttpHead`—Returns HTTP 200 on success. Response body or output class is empty. • `HttpPatch`—Returns HTTP 200 on success or HTTP 204 if the response body or output class is empty. • `HttpPost`—Returns HTTP 201 on success or HTTP 204 if the response body or output class is empty. Exceptions are the batch posting resources and methods, which return HTTP 200 on success. • `HttpPut`—Return HTTP 200 on success or HTTP 204 if the response body or output class is empty. `Ui` and `Download` action links must use `HttpGet`.
`Position`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** An integer specifying the position of the action link template relative to other action links in the group. 0 is the first position.
`RequestBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** Template for the HTTP request body sent when corresponding action links are invoked. This field can be used only for `Api` and `ApiAsync` action links. This field can contain context variables and binding variables in the form `{!Bindings.`***`key`***`}`.
`UserAlias`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If you selected `CustomUser` or `CustomExcludedUser` for `UserVisibility`, this field is the alias for the custom user. Use the alias in

Field Name	Details
	a template binding to specify the custom user when an action link group is created using the template.
UserVisibility	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Who can see the action link. This value is set per action link, not per action link group. One of these values: • `Creator`—Only the creator of the action link can see the action link. • `Everyone`—Everyone can see the action link. • `EveryoneButCreator`—Everyone but the creator of the action link can see the action link. • `Manager`—Only the manager of the creator of the action link can see the action link. • `CustomUser`—Only the custom user can see the action link. • `CustomExcludedUser`—Everyone but the custom user can see the action link.

Usage

Create action link templates in Setup. Use Apex classes in the `ConnectApi` namespace or Chatter REST API to instantiate action links from templates and to post feed elements with the action links.

For information about action links, see "Working with Action Links" in the *Apex Developer Guide* or the *Chatter REST API Developer Guide*.

ActiveScratchOrg

Represents an active scratch org. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
Description	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** A description of this scratch org.
`Edition`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The org edition of this scratch org. Possible values are `Group`, `Developer`, `Enterprise`, and `Professional`. This field is read-only.
`ExpirationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the scratch org expires. This field is read-only.
`Features`	**Type** textarea **Properties** Nillable **Description** The features enabled in this scratch org, such as `MultiCurrency`. See the *Salesforce DX Developer Guide* for the full list of valid features. This field is read-only.
`HasSampleData`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Specifies whether the scratch org contains sample data. If set to `true`, the sample data is similar to the data in a Salesforce free trial org.
`LastLoginDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date of the last user login to the scratch org. This field is read-only.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last referenced. This field is read-only.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last viewed. This field is read-only.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The auto-generated ID of this scratch org. This field is read-only.
Namespace	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace associated with this scratch org. This field is read-only.
OrgName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the scratch org. This field is read-only.
OwnerId	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns this scratch org. This field is read-only.

Field Name	Details
ScratchOrg	**Type** string **Properties** Filter, Group, Sort **Description** The org ID of the scratch org. This field is read-only.
ScratchOrgInfoId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The id of the associated `ScratchOrgInfo` object. This field is read-only.
SignupEmail	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the Administration user. This field is read-only.
SignupInstance	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce instance on which this scratch org resides. This field is read-only.
SignupTrialDays	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of days between the scratch org's creation and expiration. This field is read-only.
SignupUsername	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The username of the Administration user of the scratch org. This field is read-only.
`Template`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The template used to create this scratch org. This field is read-only.

Usage

Salesforce automatically creates an instance of this object after a `ScratchOrgInfo` record moves to the Active state. The new `ActiveScratchOrg` gets many of its field values from the `ScratchOrgInfo` object with which it is associated.

When you delete an `ActiveScratchOrg` record, its associated scratch org is deleted and its associated `ScratchOrgInfo` record is moved to the Deleted state.

SEE ALSO:

- ScratchOrgInfo
- NamespaceRegistry
- *Salesforce DX Developer Guide*

ActivityHistory

This read-only object is displayed in a related list of closed activities—past events and closed tasks—related to an object. It includes activities for all contacts related to the object. ActivityHistory fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates one of the following: • The due date of a task • The due date of an event if `IsAllDayEvent` is set to `true` This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.
`ActivitySubtype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email • Call • Event • List Email
`ActivityType`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Meeting`, or `Other`. Label is `Type`.

Field	Details
AlternateDetailId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of a record the activity is related to which contains more details about the activity. For example, an activity can be related to an EmailMessage record.
CallDisposition	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters.
CallDurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
CallObject	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of a call center. Limit is 255 characters.
CallType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.
ConnectionReceivedId	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that shared this record with your organization. This field is available only if your organization has enabled Salesforce to Salesforce and only in API versions 28.0 and later.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that your organization shared this record with. This field is available only if your organization has enabled Salesforce to Salesforce, and only in API versions 28.0 and later. The value is always `null`. You can use the PartnerNetworkRecordConnection object to forward records to connections.
`Description`	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as “North America,” “Healthcare,” or “Consulting.” Available only if the organization has the Division permission enabled.
`DurationInMinutes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.

Field	Details
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following: • If IsAllDayEvent is true, you can supply a value for either DurationInMinutes or EndDateTime. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are null, the duration defaults to one day. • If IsAllDayEvent is false, a value must be supplied for either DurationInMinutes or EndDateTime. Supplying values in both fields is allowed if the values add up to the same amount of time.
IsAllDayEvent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to true, then the activity is an event spanning a full day, and the ActivityDate defines the date of the event. If the value of this field is set to false, then the activity may be an event spanning less than a full day, or it may be a task. Label is All-Day Event.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always true. This field is set indirectly by setting the Status field on the task—each picklist value has a corresponding IsClosed value. Label is Closed.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the activity has been moved to the Recycle Bin (true) or not (false). Label is Deleted.

Field	Details
IsHighPriority	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
IsOnlineMeeting	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the activity represents an online meeting (`true`) or not (`false`). Note: This field is not available in API version 16.0 or later.
IsReminderSet	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
IsTask	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task. If the value is set to `false`, then the activity is an event. Label is `Task`.
IsVisibleInSelfService	**Type** boolean **Properties** Defaulted on create, Filter **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
Location	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** If the activity is an event, then this field contains the location of the event. If the activity is a task, then the value is `null`.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user who owns the activity.
`PrimaryAccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `AccountId` value from the activity record. Available in API versions 30.0 and later to organizations that use Shared Activities.
`PrimaryWhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `WhoId` value from the activity record. Available in API versions 30.0 and later to organizations that have enabled Shared Activities.
`Priority`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the priority of a task, such as high, normal, or low.
`ReminderDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort

Field	Details
	Description Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
`StartDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the start date and time of the event. Available in versions 29.0 and later. If the event's `IsAllDayEvent` flag is set to true (indicating an all-day event), then the time stamp in `StartDateTime` is always set to midnight in the Coordinated Universal Time (UTC) time zone. Note: Don't attempt to alter the time stamp to account for any time zone differences. If the event's `IsAllDayEvent` flag is set to false, then you must translate the time portion of the time stamp in `StartDateTime` to or from a local time zone for the user or the application, as appropriate. The translation must be in the Coordinated Universal Time (UTC) time zone. If this field has a value, then `ActivityDate` and `ActivityDateTime` either must be null or must match the value of this field. If the activity is a task, `StartDateTime` is null
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for `IsClosed`. To obtain picklist values, query TaskStatus.
`Subject`	**Type** combobox **Properties** Filter, Nillable, Sort **Description** Contains the subject of the task or event.

Field	Details
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. If your organization uses Shared Activities, when you query activities in API version 30.0 or later, the returned value of the `WhoId` field matches the value in the queried object, not necessarily in the activity record itself. If Shared Activities is enabled, the value of this field is not populated and the field `PrimaryWhoId` should be queried instead.

Usage

Query activities that are related to an object

1. Optionally, issue a describe call against the object whose activities you wish to query, to get a suggestion of the correct SOQL to use.
2. Issue a SOQL relationship query with a main clause that references the object, and an inner clause that references the activity history; for example:

```
SELECT
   (SELECT ActivityDate, Description
    FROM ActivityHistories)
FROM Account
WHERE Name Like 'XYZ%'
```

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following constraints on users who don't have the "View All Data" permission help prevent performance issues.

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with "A." Instead, you must reference a single account record.

```
SELECT
   (SELECT ActivityDate, Description
    FROM ActivityHistories
    ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC
    LIMIT 500)
FROM Account
WHERE Name = 'Acme'
LIMIT 1
```

- In the inner clause of the query, you can't use `WHERE`.
- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- In the inner clause of the query, you must sort on `ActivityDate` in descending order and `LastModifiedDate` in descending order. You can optionally display nulls last. For example: `ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC`.

SEE ALSO:

Task

AdditionalNumber

Represents an optional additional number for a call center. This additional number is visible in the call center's phone directory.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CallCenterId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description System field that contains the ID of the user who created the call center associated with this additional number. If value is null, this additional number is displayed in every call center's phone directory.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the additional number, such as Conference Room B. Limit: 255 characters.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the additional number. Limit: 80 characters.
`Phone`	**Type** phone **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** The phone number that corresponds to this additional number.

Usage

Create an additional number for a call center directory. Use this object if the number is not easily categorized as a User, Contact, Lead, Account, or the other object. Examples include phone queues or conference rooms.

Address

Represents a mailing, billing, or home address.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Address	**Type** address **Properties** Filter, Nillable **Description** The full address.
AddressType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Picklist of address types. The values are: • Mailing • Shipping • Billing • Home
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address city.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address country.
Description	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of the address.
`DrivingDirections`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Directions to the address.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`LocationType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Picklist of location types. The values are: • Warehouse (default) • Site • Van • Plant

Field Name	Details
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the address.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** A lookup field to the parent address. For example, if the address is a billing address, its parents address might be the address of the associated warehouse.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address postal code.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The address state.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The address street.
`TimeZone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Picklist of available time zones.

Usage

Important: “Address” in Salesforce can also refer to the Address compound field found on many standard objects. When referencing the Address object in your Apex code, always use `Schema.Address` instead of `Address` to prevent confusion with the standard Address compound field. If referencing both the address object and the Address field in the same snippet, you can differentiate between the two by using `System.Address` for the field and `Schema.Address` for the object.

AgentWork

Represents a work assignment that’s been routed to an agent. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `getDeleted()`, `getUpdated()`, `retrieve()`, `undelete()`

Fields

Field	Details
`AcceptDatetime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was accepted.
`ActiveTime`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The amount of time an agent actively worked on the work item. Tracks when the item is open and in focus in the agent's console.
`AgentCapacityWhenDeclined`	**Type** double **Properties** Filter, Nillable, Sort **Description** The agent's capacity when declining work, either explicitly or through push timeout.
`AssignedDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was assigned to an agent,
`CancelDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was canceled.
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort **Description** The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. When an agent's combined work items reach 100%, the agent won't receive new work items until there is enough open capacity for more work. For example, if you give phone calls a capacity percentage of *100*, an agent on a call doesn't receive new work items until the call ends.
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort

Field	Details
	Description The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if cases are assigned a capacity weight of `2`, an agent with a capacity of `6` can accept up to 3 cases before the agent is at capacity and can't receive new work items.
`CloseDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work item was closed.
`CreatedById`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the User who created this record.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on createFilter, Sort **Description** Date and time when this record was created.
`DeclineDatetime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when the agent declined this record.
`DeclineReason`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The provided reason for why an agent declined the work request.

Field	Details
HandleTime	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time an agent had the work item open. Calculated by `Close Time – Accepted Time`.
Id	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** The ID of the AgentWork object.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
LastModifiedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** The ID of the user who last modified this record.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description An automatically generated ID number that identifies the record.
OriginalQueueId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the queue that the work assignment was originally routed to.
PushTimeout	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of seconds set for push timeout. `0` is returned when push timeout isn't enabled. Available in API version 36.0 and later.
PushTimeoutDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the push timeout event occurred. Available in API version 36.0 and later.
RequestDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the work was requested.
ServiceChannelId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel that's associated with the work assignment.
ShouldSkipCapacityCheck	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether to skip checking an agent's available capacity (`true`) or not (`false`) when an externally routed work item is created. This field is used when agents can simultaneously handle work from both Omni-Channel queues and queues using external routing. When `true`, the receiving agent can exceed their set capacity to accept the item, but they don't receive more Omni-Channel routed work. When `false`, the receiving agent can't exceed their set capacity and must have enough open capacity to accept the item.
`SpeedToAnswer`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time between when the work was requested and when an agent accepted it.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The working status of the work item. Valid values are: • Assigned – The item is assigned to the agent but hasn't been opened. • Opened – The agent opened the item. • Unavailable – The item was assigned to the agent but the agent became unavailable (went offline or lost connection). • Declined – The item was assigned to the agent but the agent explicitly declined it. • DeclinedOnPushTimeout – The item was declined because push time-out is enabled and the item request timed out with the agent. • Closed – The item is closed. • Canceled – The item no longer needs to be routed. For example: a chat visitor cancels their Omni-Channel routed chat request before it reaches an agent. • Transferred–The item was transferred from an agent to another agent, queue, or skill.
`SystemModstamp`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when a user or automated process (such as a trigger) last modified this record.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user that the work item was assigned to.
`WorkItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the object that's routed to the agent through Omni-Channel.

Usage

`AgentWork` records can only be deleted if they have the status Closed, Declined, or Unavailable. They can't be deleted if their status is Assigned or Opened because they're active in Omni-Channel.

`AgentWork` records have the status Assigned when they're created. Once created, the record is automatically pushed to the assigned agent.

While the metadata for `AgentWork` indicates support for `upsert()` and `update()`, these calls aren't used with `AgentWork` because none of its fields can be updated.

Apex triggers are supported with `AgentWork`.

AllowedEmailDomain

Represents an allowed email domain for users in your organization. You can define a whitelist to restrict the email domains allowed in a user's `Email` field. This object is available in API version 29.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Manage Internal Users" user permission to use this object.

Note: If you don't see this object, contact your Salesforce representative to enable it.

Fields

Field	Details
`Domain`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** An allowed email domain for users.

Announcement

Represents a Chatter group announcement. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ExpirationDate`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Required. The date on which the announcement expires. Announcements display on the group UI until 11:59 p.m. local time on the selected date.
`FeedItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the FeedItem that contains the content of the announcement. Announcements are stored as text posts.
`ParentId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of the parent CollaborationGroup that the announcement belongs to. An announcement can belong only to a single Chatter group.
`SendEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Set to `true` to email all group members when an announcement is posted to the group. The default is `false`. This requires the user to have the “Send announcement on email” permission. This field is available in API version 36.0 and later. Note: This field is currently available to select customers through a pilot program. To be nominated to join this pilot program, contact Salesforce. Additional terms and conditions may apply to participate in the pilot program. Please note that pilot programs are subject to change, and as such, we cannot guarantee acceptance into this pilot program or a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based upon features that are currently available.

Usage

Group owners, managers, and users with the “Modify All Data” permission can use the Announcement object to create, edit, and delete group announcements. Creating a group announcement is a three-step process.

1. Use the FeedItem object to create a text post with the announcement’s content. Use the CollaborationGroup record you want to post the announcement to as the parent of this feed item.
2. Next, use the feed item ID and an expiration date to create the announcement record.
3. Finally, update the `AnnouncementId` field in the CollaborationGroup record with the ID of the announcement you created.

To delete the group announcement, simply delete the `AnnouncementId` value in the CollaborationGroup record. To restore a group announcement, update the `AnnouncementId` field for a group with the announcement’s ID. The expiration date for the announcement should be in the future and the feed item used to create the announcement should be parented by the same group.

ApexClass

Represents an Apex class.

Note: Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create or update them using the API. Instead, use the Ant Migration Tool, the Salesforce user interface, or the Force.com IDE to create or update Apex classes or triggers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this class. Every class has an API version specified at creation.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** The Apex class definition. Limit: 1 million characters.
`bodyCrc`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The CRC (cyclic redundancy check) of the class or trigger file.
`IsValid`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether any dependent metadata has changed since the class was last compiled (`true`) or not (`false`).
`LengthWithoutComments`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Length of the class without comments.
`Name`	**Type** string **Properties** Group, Sort, Create, Filter, Update **Description** Name of the class. Limit: 255 characters
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Status`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** The current status of the Apex class. The following string values are valid: • `Active`—The class is active. • `Deleted`—The class is marked for deletion. This is useful for managed packages, because it allows a class to be deleted when a managed package is updated. Note: The ApexTrigger `Status` field includes an `Inactive` option, but it is only supported for ApexTrigger. For more information, see the *Metadata API Developer Guide*.

SEE ALSO:

ApexTrigger

Developer Guide: Apex Developer Guide

ApexComponent

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`.

Represents a definition for a custom component that can be used in a Visualforce page alongside standard components such as `<apex:relatedList>` and `<apex:dataTable>`. For information, see the *Visualforce Developers Guide*.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this custom component. Every custom component has an API version specified at creation. If the API version is less than 15.0 and `ApiVersion` is not specified, `ApiVersion` defaults to 15.0.

Field	Details
`ControllerKey`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identifier for the controller associated with this custom component: • If the `ControllerType` parameter is set to `Standard` or `StandardSet`, this value is the name of the sObject that defines the controller. • If the `ControllerType` parameter is set to `Custom`, this value is the name of the Apex class that defines the controller.
`ControllerType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of controller associated with this Visualforce custom component. Possible values include: • `Not Specified`, for custom components defined without a value for the `controller` attribute on the `<apex:component>` tag • `Standard`, a value that can't be used with custom components or errors may occur • `StandardSet`, a value that can't be used with custom components or errors may occur • `Custom`, for components that have a value for the `controller` attribute on the `<apex:component>` tag
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the Visualforce custom component.
`Markup`	**Type** textarea **Properties** Create, Update **Description** The Visualforce markup, HTML, Javascript, and any other Web-enabled code that defines the content of the custom component.

Field	Details
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text used to identify the Visualforce custom component in the Setup area of Salesforce. The Label for this field is **Label**.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of this Visualforce custom component.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Usage

Use custom components to encapsulate a common design pattern and then reuse that pattern several times in one or more Visualforce pages. All users who can view Visualforce pages can view custom components, but the "Customize Application" permission is required to create or update custom components.

SEE ALSO:

ApexPage

StaticResource

Developer Guide: Visualforce Developer Guide

ApexLog

Represents a debug log containing information about a transaction, including information about Apex, Visualforce, and workflow and validation rules. This object is available in API version 19.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`Application`	**Type** string **Properties** Filter, Group, Sort **Description** This value depends on the client type that triggered the log. • For API clients, this value is the client ID. • For browser clients, this value is `Browser`.
`DurationMilliseconds`	**Type** int **Properties** Filter, Group, Sort **Description** Duration of the transaction in milliseconds.
`Location`	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies the location of the origin of the log. Values are: • `Monitoring`—Log is generated as part of debug log monitoring. These types of logs are maintained for seven days or until a user deletes them. • `SystemLog`—Log is generated from the Developer Console. These types of logs are maintained for 24 hours or until the user clears them.
`LogLength`	**Type** int **Properties** Filter, Group, Sort **Description** Length of the log in bytes.
`LogUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user whose actions triggered the debug log.
`Operation`	**Type** string **Properties** Filter, Group, Sort **Description** Name of the operation that triggered the debug log, such as `APEXSOAP`, `Apex Sharing Recalculation`, and so on.
`Request`	**Type** string **Properties** Filter, Group, Sort **Description** Request type. Values are: • `API`—Request came from the API • `Application`—Request came from the Salesforce user interface

Field	Details
StartTime	**Type** dateTime **Properties** Filter, Sort **Description** Start time of the transaction.
Status	**Type** string **Properties** Filter, Group, Sort **Description** Status of the transaction. This value is either `Success`, or the text of an unhandled Apexw exception.

Usage

You can read information about this object, as well as delete it, but you can't update or insert it.

SEE ALSO:

ApexClass

ApexTrigger

Developer Guide: Apex Developer Guide

ApexPage

Represents a single Visualforce page.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
ApiVersion	**Type** double

Field	Details
	Properties Create, Filter, Sort, Update **Description** The API version for this page. Every page has an API version specified at creation. If the API version is less than 15.0 and `ApiVersion` is not specified, `ApiVersion` defaults to 15.0.
`ControllerKey`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identifier for the controller associated with this page: • If the `ControllerType` parameter is set to `Standard` or `StandardSet`, this value is the name of the sObject that defines the controller. • If the `ControllerType` parameter is set to `Custom`, this value is the name of the Apex class that defines the controller.
`ControllerType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of controller associated with this Visualforce page. Possible values include: • `Not Specified`, for pages defined with neither a `standardController` nor a `controller` attribute on the `<apex:page>` tag • `Standard`, for pages defined with the `standardController` attribute on the `<apex:page>` tag • `StandardSet`, for pages defined using the `standardController` and `recordSetVar` attribute on the `<apex:page>` tag • `Custom`, for pages defined with the `controller` attribute on the `<apex:page>` tag
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the Visualforce page.
`isAvailableInTouch`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if Visualforce tabs associated with the Visualforce page can be used in the Salesforce app (`true`) or not (`false`). (Use of this field for Salesforce Touch is deprecated.) This field is available in API version 27.0 and later. Standard object tabs that are overridden with a Visualforce page aren't supported in the Salesforce app, even if you set this field for the page. The default Salesforce app page for the object is displayed instead of the Visualforce page.
`IsConfirmationTokenRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether `GET` requests for the page require a CSRF confirmation token (`true`) or not (`false`). This field is available in API version 28.0 and later. If you change this field's value from `false` to `true`, links to the page require a CSRF token to be added to them, or the page will be inaccessible.
`Markup`	**Type** textarea **Properties** Create, Update **Description** The Visualforce markup, HTML, Javascript, and any other Web-enabled code that defines the content of the page.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text used to identify the Visualforce page in the Setup area of Salesforce. The Label is **Label**.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of this Visualforce page.

Field	Details
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Usage

Use Visualforce pages to add custom content that extends the base Salesforce application functionality. All users in Visualforce-enabled organizations can view Visualforce pages, but the "Customize Application" permission is required to create or update them.

SEE ALSO:

ApexComponent

StaticResource

Developer Guide: Visualforce Developer Guide

ApexTestQueueItem

Represents a single Apex class in the Apex job queue. This object is available in API version 23.0 and later.

This object is available in API version 23.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Description
ApexClassId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Apex class whose tests are to be executed.
ExtendedStatus	**Type** string **Properties** Filter, Nillable, Sort **Description** The pass rate of the test run. For example: "(4/6)". This means that four out of a total of six tests passed. If the class fails to execute, this field contains the cause of the failure.
ParentJobId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Points to the AsyncApexJob that represents the entire test run. If you insert multiple Apex test queue items in a single bulk operation, the queue items will share the same parent job. This means that a test run can consist of the execution of the tests of several classes if all the test queue items are inserted in the same bulk operation.
ShouldSkipCodeCoverage	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether to opt out of collecting code coverage information during Apex test runs. Available in API version 43.0 and later.
Status	**Type** picklist

Field Name	Description
	Properties Filter, Group, Restricted picklist, Sort, Update **Description** The status of the job. Valid values are: • `Holding`[1] • `Queued` • `Preparing` • `Processing` • `Aborted` • `Completed` • `Failed` [1] This status applies to batch jobs in the Apex flex queue.
`TestRunResultID`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated ApexTestRunResult object.

Usage

Insert an `ApexTestQueueItem` object to place its corresponding Apex class in the Apex job queue for execution. The Apex job executes the test methods in the class.

To abort a class that is in the Apex job queue, perform an update operation on the ApexTestQueueItem object and set its `Status` field to *`Aborted`*.

If you insert multiple Apex test queue items in a single bulk operation, the queue items will share the same parent job. This means that a test run can consist of the execution of the tests of several classes if all the test queue items are inserted in the same bulk operation.

ApexTestResult

Represents the result of an Apex test method execution. This object is available in API version 23.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
ApexClassId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The Apex class whose test methods were executed.
ApexLogId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Points to the ApexLog for this test method execution if debug logging is enabled; otherwise, `null`.
ApexTestRunResultId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the ApexTestRunResult that represents the entire test run.
AsyncApexJobId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Points to the AsyncApexJob that represents the entire test run. This field points to the same object as `ApexTestQueueItem.ParentJobId`.
Message	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The exception error message if a test failure occurs; otherwise, `null`.

Field Name	Details
MethodName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The test method name.
Outcome	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The result of the test method execution. Can be one of these values: • Pass • Fail • CompileFail • Skip
QueueItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Points to the ApexTestQueueItem which is the class that this test method is part of.
RunTime	**Type** int **Properties** Create, Filter, Nillable, Sort, Update **Description** The time it took the test method to run, in seconds.
StackTrace	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The Apex stack trace if the test failed; otherwise, `null`.

Field Name	Details
`TestTimestamp`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The start time of the test method.

Usage

You can query the fields of the `ApexTestResult` record that corresponds to a test method executed as part of an Apex class execution.

Each test method execution is represented by a single `ApexTestResult` record. For example, if an Apex test class contains six test methods, six `ApexTestResult` records are created. These records are in addition to the `ApexTestQueueItem` record that represents the Apex class.

Each ApexTestResult record has an associated ApexTestResultLimits on page 309 record, which captures the Apex limits used during execution of the test method.

ApexTestResultLimits

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each ApexTestResult record. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`ApexTestResultId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated ApexTestResult object.
`AsyncCalls`	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The number of asynchronous calls made during the test run.
`Callouts`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of callouts made during the test run.
`Cpu`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The amount of CPU used during the test run, in milliseconds.
`Dml`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of DML statements made during the test run.
`DmlRows`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of rows accessed by DML statements during the test run.
`Email`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of email invocations made during the test run.

Field Name	Details
`LimitContext`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether the test run was synchronous or asynchronous.
`LimitExceptions`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates whether your org has any limits that differ from the default limits.
`MobilePush`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of mobile push calls made during the test run.
`QueryRows`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of rows queried during the test run.
`Soql`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The number of SOQL queries made during the test run.
`Sosl`	**Type** int **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The number of SOSL queries made during the test run.

Usage

The ApexTestResultLimits object is populated for each test method execution, and it captures the limits used between the Test.startTest() and Test.stopTest() methods. If startTest() and stopTest() aren't called, limits usage is not captured. Note the following:

- The associated test method must be run asynchronously.
- Limits for asynchronous Apex operations (batch, scheduled, future, and queueable) that are called within test methods are not captured.
- Limits are captured only for the default namespace.

ApexTestRunResult

Contains summary information about all the test methods that were run in a particular Apex job. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`AsyncApexJobId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The parent Apex job ID for the result.
`ClassesCompleted`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of classes executed during the test run.

Field Name	Details
ClassesEnqueued	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The total number of classes enqueued during the test run.
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the test run ended.
IsAllTests	**Type** boolean **Properties** Create, Filter, Group, Sort, Update **Description** Indicates whether all Apex test classes were run.
JobName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Reserved for future use.
MethodsCompleted	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of methods completed during the test run. This value is updated after each class is run.
MethodsEnqueued	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The total number of methods enqueued for the test run. This value is initialized before the test runs.
MethodsFailed	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of methods that failed during this test run. This value is updated after each class is run.
Source	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the test run, such as the Developer Console.
StartTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The time at which the test run started.
Status	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The status of the test run. Values include: • Queued • Processing • Aborted • Completed • Failed
TestTime	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The time it took the test to run, in seconds.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user who ran the test run.

ApexTestSuite

Represents a suite of Apex classes to include in a test run. A TestSuiteMembership object associates each class with the suite. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Description
`TestSuiteName`	**Type** string **Properties** Create, Filter, Group, Sort, Unique, Update **Description** The name of the Apex test suite. This label appears in the user interface. This value is case-sensitive and must be unique.

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
    AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

SEE ALSO:

TestSuiteMembership

ApexTrigger

Represents an Apex trigger.

Note: Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create or update them using the API. Instead, use the Ant Migration Tool, the Salesforce user interface, or the Force.com IDE to create or update Apex classes or triggers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this trigger. Every trigger has an API version specified at creation.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** The Apex trigger definition. Limit: 1 million characters.
`bodyCrc`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update

Field	Details
	Description The CRC (cyclic redundancy check) of the class or trigger file.
`IsValid`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether any dependent metadata has changed since the trigger was last compiled (`true`) or not (`false`).
`LengthWithoutComments`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Length of the trigger without comments
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the trigger. Limit: 255 characters
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.

Field	Details
	• In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The current status of the Apex trigger. The following string values are valid: • `Active`—The trigger is active. • `Inactive`—The trigger is inactive, but not deleted. • `Deleted`—The trigger is marked for deletion. This is useful for managed packages, because it allows a class to be deleted when a managed package is updated. Note: `Inactive` is not valid for ApexClass. For more information, see the *Metadata API Developer Guide*.
`TableEnumOrId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the object associated with the trigger, such as Account or Contact.
`UsageAfterDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after delete` trigger (`true`) or not (`false`).
`UsageAfterInsert`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after insert` trigger (`true`) or not (`false`).
`UsageAfterUndelete`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Specifies whether the trigger is an `after undelete` trigger (`true`) or not (`false`).
`UsageAfterUpdate`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is an `after update` trigger (`true`) or not (`false`).
`UsageBeforeDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is a `before delete` trigger (`true`) or not (`false`).
`UsageBeforeInsert`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is a `before insert` trigger (`true`) or not (`false`).
`UsageBeforeUpdate`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is a `before update` trigger (`true`) or not (`false`).
`UsageIsBulk`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether the trigger is defined as a bulk trigger (`true`) or not (`false`).

Field	Details
	Note: This field is not used for Apex triggers saved using Salesforce API version 10.0 or higher: all triggers starting with that version are automatically considered bulk, and this field will always return `true`.

SEE ALSO:

ApexClass

Developer Guide: Apex Developer Guide

AppDefinition

Represents the metadata of an app and its navigation items. Metadata is returned only for apps that the current user can access. This object is available in API version 43.0 and later.

Supported Calls

`query()`

Fields

Field Name	Details
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The optional description of the application.
`DeveloperName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name of the application.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description A unique virtual Salesforce ID for the application.
`HeaderColor`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The header color in the application. Specify the color with a hexadecimal code, such as #0000FF for blue.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** A default Salesforce ID.
`IsLargeFormFactorSupported`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Large form factor is set in the `CustomApplication` metadata.
`IsMediumFormFactorSupported`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Medium form factor is set in the `CustomApplication` metadata.
`IsNavAutoTempTabsDisabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the navigation automatically creates temporary tabs settings.

Field Name	Details
IsNavPersonalizationDisabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether navigation personalization is disabled.
IsOverrideOrgTheme	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether to override the global theme for the org. When `true`, the color scheme and logo that the user has set are used. When `false`, the global theme for the org is used, even if the user has set a color scheme and logo.
IsSmallFormFactorSupported	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Small form factor is set in the `CustomApplication` metadata.
Label	**Type** string **Properties** Filter, Nillable, Sort **Description** The localized label value corresponding to the MasterLabel field.
LogoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The logo URL of the application as selected by the admin.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The non-translated label entered when the application was created.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace of the application.
`NavType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of navigation for the application. The value `Standard` is for Lightning Experience. The value `Console` is for Salesforce console. A null value is for Salesforce Classic.
`UiType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the type of custom application. The value `Aloha` is for Salesforce Classic, and `Lightning` is for Lightning Experience.
`UtilityBar`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the utility bar associated with this application.

AppExtension

Represents a connection between the Field Service Lightning mobile app and another app, typically for passing record data to the Salesforce app or other apps. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AppExtensionLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label in the UI for the app extension.
AppExtensionName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name of the app extension.
FieldServiceMobileSettingsId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of a set of field service mobile settings.
InstallationUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL that takes the user to the app install location, such as the App Store or Google Play.
LaunchValue	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** A value directing the Field Service Lightning app to the appropriate app extension. The Launch Value can be a static URL or a dynamic value that you can represent with certain tokens. These tokens pass field information from the record that the user is currently viewing. The basic format for these tokens is based on the field names; for example: **{!$Name}**.
`ScopedToObjectTypes`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the types of records from which the app extension can be activated. Scoping an app extension to an object lets users activate the app extension from records of the specified type. For example, to scope to both work orders and service appointments you would use the value `WorkOrder,ServiceAppointment`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A picklist of types of app extensions: iOS, Android, Flow, and Lightning Apps

AppMenuItem

Represents the organization's default settings for items in the app menu or App Launcher.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApplicationId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The 15-character ID for the menu item.
`CanvasAccessMethod`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The access method for the canvas app. Values can be: • OAuth Webflow (GET) • Signed Request (POST)
`CanvasEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the app menu item is a canvas app (`true`) or not (`false`).
`CanvasOptions`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the options enabled for a canvas connected app. The options are: • PersonalEnabled—The app is enabled as a canvas personal app. • HideHeader—The publisher header, which contains the “What are you working on?” text, is hidden. • HideShare—The publisher **Share** button is hidden. This field is available in API version 34.0 and later.
`CanvasReferenceId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The canvas app unique identifier.

Field	Details
CanvasSelectedLocations	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The selected locations for the canvas app which define where the canvas app can appear in the user interface. For example: `Chatter,ChatterFeed,Publisher,ServiceDesk`
CanvasUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL of the canvas app.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A description of this menu item.
IconUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The icon for the menu item’s application.
InfoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL for more information about the application.
IsAccessible	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description If `true`, the current user is authorized to use the app.
`IsUsingAdminAuthorization`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the app is pre-authorized for certain users by the administrator.
`IsVisible`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the app is visible to users of the organization, by default.
`Label`	**Type** string **Properties** Group, Nillable **Description** The app's name.
`LogoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The logo for the menu item's application. The default is the initials of the `Label` value.
`MobileStartUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The location mobile users are directed to after they've authenticated. This field is only used with connected apps.
`Name`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The API name of the item.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`SortOrder`	**Type** int **Properties** Filter, Group, idLookup, Sort **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order of 5 appears between items with sort order values of 3 and 9.
`StartUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For a connected app, the location users are directed to after they've authenticated. Otherwise, the application's default start page.
`Type`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of application represented by this item. The types are: • ConnectedApplication • Network • ServiceProvider • TabSet
`UserSortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that represents where the user set this item in the menu (or App Launcher). For example, an item with a sort order value of 5 appears between items with sort order values of 3 and 9. This value is separate from SortOrder so you can create logic incorporating both values. For example, if you want the user-sorted items to appear first, followed by the organization order for the rest, use: `SELECT ApplicationId,SortOrder,UserSortOrder FROM AppMenuItem order by userSortOrder NULLS LAST, sortOrder NULLS LAST`

Usage

Use this read-only object to view an entry in the Lightning Platform app menu or the App Launcher. You can create a SOQL query to retrieve all items, even items the user does not see from the user interface.

There are many ways you can use AppMenuItem. Here are some examples:

- Build your own App Launcher or app menu in Salesforce. Create a custom page showing all the apps you have access to and that lets you run them using single sign-on.
- Build your own App Launcher or app menu on a tablet or mobile app. You can have your own app for launching applications on various mobile devices.
- Build an app launcher into your company's intranet. There's no need to have it run on Salesforce because Salesforce APIs let you integrate with Salesforce programmatically and build an app launcher.

Tip: To get metadata information about apps and their tabs, use the Apex `Schema.describeTabs()` method, the REST API `/vXX.X/tabs/` resource, or the SOAP API `describeTabs()` call.

Approval

Represents an approval request for a Contract.

Note: This object is read-only and is specific to approvals on the Contract object. It isn't equal to or involved in the approval processes represented by the ProcessInstance, which is more powerful.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApproveComment`	**Type** string **Properties** Filter, Nillable, Sort **Description** Text entered by the user when they approved or rejected this approval request. Required. Limit: 4,000 characters.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the User being asked to approve or reject the approval request. Must be a valid User ID. Required.

Field	Details
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the Contract associated with this approval request. Must be a valid contract ID.
RequestComment	**Type** string **Properties** Filter, Nillable, Sort **Description** Text entered by the User who created the approval request. Optional. This field can't be updated after the Approval has been created. Limit: 4,000 characters.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Required. Status of this approval request. One of the following picklist values: • `Pending`—Specified only when the Approval request is created (`create()` call) • `Approved`—Specified only when the Approval request is approved (`update()` call) • `Rejected`—Specified when the Approval request is rejected (`update()` call) or when it is created (`create()` call) and immediately rejected for archival/historical purposes.

Usage

This object allows client applications to programmatically handle approval requests for a Contract. Initially, to request a Contract approval, a client application might create a new Approval request record, specifying the `ParentId`, `OwnerId` (user approving or rejecting the request), `Status` (Pending), and (optionally) `RequestComment` fields. Note that when a client application creates the first approval request, if the value of the Contract `Status` field is Draft, then the Approval `Status` for this record is automatically changed to In Approval Process (see ContractStatus for more information).

A client application might subsequently update an existing Approval request, specifying the `Status` (Approved or `Rejected`) and an `ApproveComment` (required); the `RequestComment` field can't be updated. Updating an Approval record (either to approve or reject) requires the client application to be logged in with "Approve Contract" permission. To update an Approval request, its `Status` must be Pending—a client application can't update an Approval that has already been Approved or Rejected. To re-submit an approval request for a given Contract, a client application must create a new, separate Approval record and repeat the approval process.

Once a Contract has been approved (not rejected), the Contract `LastApprovedDate` field is automatically updated, however the Contract `Status` field isn't updated, it keeps the value InApproval.

An approved Contract must be activated explicitly. Client applications can activate a Contract by setting the value in its `Status` field to Activated, or a User can activate a Contract via the Salesforce user interface.

A Contract can have multiple approval requests in various states (Pending, Approved, and Rejected). In addition, one User can have multiple approval requests associated with the same Contract.

Client applications can't explicitly deleteApproval records. Approval records are deleted automatically if the parent Contract is deleted.

SEE ALSO:

Object Basics

AppTabMember

Represents the list of tabs for each of the available apps. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`AppDefinitionId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The ID of the `AppDefinition` object.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the color.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number used to sort this tab in the application.

Field Name	Details
TabDefinitionId	**Type** string **Properties** Filter, Nillable, Sort **Description** The ID of the `TabDefinition` object.
WorkspaceDriverField	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Refers to the workspace mapping in the `CustomApplication` Metadata API object.

*Article Type*__DataCategorySelection

A data category selection represents a data category that classifies an article. This object is available in API version 19.0 and later.

This object can be used to associate an article with data categories from a data category group or to query the category selections for an article.

The object name is variable and has a syntax of *`Article Type`*__DataCategorySelection, where *`Article Type`* is the `Object Name` for the article type associated with the article. For example, `Offer__DataCategorySelection` represents the association between the `Offer` article type and its data categories. Every article is associated with an article type.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `getDeleted()`, `retrieve()`

Special Access Rules

Users can only access, create or delete data category selection visible to their role, permission set, or profile. If a user has partial visibility on an article's categorization, only the visible categories are returned.

Fields

Field Name	Details
DataCategoryGroupName	**Type** DataCategoryGroupReference

Field Name	Details
	Properties Create **Description** Unique name of the data category group which has categories associated with the article.
`DataCategoryName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category associated with the article.
`ParentId`	**Type** reference **Properties** Create, Filter **Description** ID of the article associated with the data category selection.

Usage

Every article in Salesforce Knowledge can be categorized. A data category selection represents a category that has been selected to classify an article. You can use the *`Article Type`*__DataCategorySelection object to query and manage article categorization in your organization. Client applications can create a categorization for an article with a Draft status. They can also delete and query article categorizations.

Note: When using *`Article Type`*__DataCategorySelection to classify an article, you can't select both a category (for example USA) and one of its descendants (California) or ascendant categories (North America). In this case, only the first category is selected.

Answer communities use QuestionDataCategorySelection to classify questions.

SOQL Sample

The following SOQL query returns the data category selections used to classify the article whose ID is `ka0D000000005ApIAI`.

```
SELECT Id,DataCategoryName, ParentId
        FROM Offer__DataCategorySelection WHERE ParentId='ka0D000000005ApIAI'
```

This clause only returns category unique names. To retrieve category labels use the following clause:

```
SELECT Id,toLabel(DataCategoryName), ParentId
        FROM Offer__DataCategorySelection WHERE ParentId='ka0D000000005ApIAI'
```

Tip: You can also use relationship queries to retrieve categorizations from an article type.

SEE ALSO:

QuestionDataCategorySelection

Data Categories

Articles

*Article Type*__Feed

Represents a single feed item in the feed displayed on the detail page for an article. This object is available in API version 20.0 and later.

An article feed shows recent changes to an article record for any fields that are tracked in feeds, and posts and comments about the article. It is a useful way to stay up-to-date with changes made to articles in Salesforce Knowledge. This object is available in API version 20.0 and later. The object name is variable and uses a *Article Type*__Feed syntax, where *Article Type* is the `Object Name` for the article type associated with the article. For example, `Offer__Feed` represents a feed item on an article based on the `Offer` article type.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of *Article Type*__Feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your

Field	Details
	comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDate DESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int

Field	Details
	Properties Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the article that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item:

Field	Details
	• `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case

Field	Details
	Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Usage

Use this object to track changes for an article. You can only delete a feed that you created, or if you have the "Modify All Data" permission or "Modify All" permission on the KnowledgeArticle object.

SEE ALSO:

KnowledgeArticle

EntitySubscription

NewsFeed

UserProfileFeed

Asset

Represents an item of commercial value, such as a product sold by your company or a competitor, that a customer has purchased and installed.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Required) ID of the Account associated with this asset. Must be a valid account ID. Required if `ContactId` is not specified.
`AssetLevel`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The asset's position in an asset hierarchy. If the asset has no parent or child assets, its level is 1. Assets that belong to a hierarchy have a level of 1 for the root asset, 2 for the child assets of the root asset, 3 for their children, and so forth. Note: On assets created before the introduction of this field, the asset level defaults to –1. Once the asset record is updated, the asset level is calculated and automatically updated.
`AssetProvidedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account that provided the asset, typically a manufacturer.
`AssetServicedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account in charge of servicing the asset.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required if `AccountId` is not specified. ID of the Contact associated with this asset. Must be a valid contact ID that has an account parent (but does not need to match the asset's `AccountId`).
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the asset.
`InstallDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Date when the asset was installed.
`IsCompetitorProduct`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this Asset represents a product sold by a competitor (`true`) or not (`false`). Default value is `false`. Its UI label is Competitor Asset.
`IsInternal`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that the asset is produced or used internally (`true`) or not (`false`). Default value is `false`. Its UI label is Internal Asset.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last modified. Its UI label is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the asset was last viewed.
`LocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset's location. Typically, this is the place where the asset is stored, such as a warehouse or van.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** (Required) Name of the asset. Label is Asset Name.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The asset's owner. By default, the asset owner is the user who created the asset record. Its UI label is Asset Owner.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset's parent asset. Its UI label is Parent Asset.
Price	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Price paid for this asset.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Optional) ID of the Product2 associated with this asset. Must be a valid Product2 ID. Its UI label is Product.
ProductCode	**Type** string **Properties** Filter, Group, Sort, Nillable

Field	Details
	Description The product code of the related product.
PurchaseDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which this asset was purchased.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Quantity purchased or installed.
RootAssetId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level asset in an asset hierarchy. Depending on where an asset lies in the hierarchy, its root could be the same as its parent. Its UI label is Root Asset.
SerialNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Serial number for this asset.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values. The default picklist includes the following values: • Purchased • Shipped • Installed

Field	Details
	• `Registered` • `Obsolete`
`StockKeepingUnit`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The SKU assigned to the related product.
`UsageEndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when usage for this asset ends or expires.

Usage

Use this object to track products sold to customers. With asset tracking, a client application can quickly determine which products were previously sold or are currently installed at a specific account. You can also create hierarchies of up to 10,000 assets.

For example, your organization might want to renew and up-sell opportunities on products sold in the past. Similarly, your organization might want to track competitive products that exist in a customer environment that could potentially be replaced or swapped out.

Asset tracking is also useful for product support, providing detailed information to assist with product-specific support issues. For example, the `PurchaseDate` or `SerialNumber` could indicate whether a given product has certain maintenance requirements, including product recalls. Similarly, the `UsageEndDate` might indicate when the asset was removed from service or when a license or warranty expires.

If an application creates a new Asset record, it must specify a `Name` and either an `AccountId`, `ContactId`, or both.

SEE ALSO:

Object Basics

AssetFeed

Represents a single feed item in the feed displayed on the detail page for an asset record.

An asset feed shows recent changes to an asset record for any fields that are tracked in feeds, and comments and posts about the record. It is a useful way to stay up-to-date with changes to assets.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Asset object
- "Moderate Chatter"

> **Note:** Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the AssetFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. **Tip:** In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is `ContentPost`. Setting AssetFeed automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string

Field Name	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter. Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. Use FeedItem instead. The ID of the associated FeedPost. A FeedPost represents the following types of changes in an AssetFeed: status updates, changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text.

Field Name	Details
	Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on the feed item, then `LastModifiedDate` becomes the `CreatedDate` for the FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.

Field Name	Details
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of the LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. NetworkScope can have the following values: • NetworkId—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the asset record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the ContentVersion article associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as an AssetFeed object of `Type` `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the AssetFeed. When the `Type` is `LinkPost`, the `LinkUrl` is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of AssetFeed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher.

Field Name	Details
	• `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for an asset record.

SEE ALSO:

Asset

Product2

FeedItem

AssetOwnerSharingRule

Represents the rules for sharing an Asset with users other than the owner. This object is available in API version 33.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
AssetAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • Read • Edit
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Cases owned by users in the source group trigger the rule to give access.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for assets. General sharing uses this object.

SEE ALSO:

Metadata API Developer Guide: SharingRules

AssetRelationship

Represents a non-hierarchical relationship between assets due to replacement, upgrade, or other circumstances.

Asset relationships appear in the Primary Assets and Related Assets related lists on asset records in the UI.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The replacement asset.
AssetRelationshipNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the asset relationship.
FromDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The day the replacement asset is installed.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the asset relationship was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the asset relationship was last viewed.
RelatedAssetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The asset being replaced.
RelationshipType	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of relationship between the assets. This field comes with three values—Replacement, Upgrade, and Crossgrade—but you can create more in Setup.
`ToDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The day the replacement asset is uninstalled.

AssetShare

Represents a sharing entry on an Asset. This object is available in API version 33.0 and later.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`AssetAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Asset. The possible values are: • `Read` • `Edit`

Field	Details
	• `All` This value is not valid for creating or deleting records. This field must be set to an access level that is higher than the organization's default access level for cases.
`AssetId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Asset associated with this sharing entry. This field can't be updated.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Asset with them. • `Owner`—The User is the owner of the Asset. • `Rule`—The User or Group has access via an Asset sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Asset. This field can't be updated.

Usage

This object allows you to determine which users and groups can view and edit Asset records owned by other users.

If you attempt to create a new record that matches an existing record, request updates any modified fields and returns the existing record.

AssetTag

Associates a word or short phrase with an Asset.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

AssetTag stores the relationship between its parent TagDefinition and the Asset being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

AssetTokenEvent

Represents an event associated with an asset token, such as token issuance and registration of a connected device as an Asset. This object is available in API version 39.0 and later.

An asset token event records successful completion of an OAuth 2.0 asset token flow for a connected device. An event is published whenever an access token and actor token (optional) are successfully exchanged for an asset token. This object is designed to support custom business processes, such as automatic logging of a case when an event occurs. Create Apex triggers that subscribe to an event and execute after asset token issuance. This object is read only and can't be retrieved using a SOQL query. Asset token events are not displayed in the Setup user interface for Platform Events.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ActorTokenPayload`	**Type** textarea **Properties** Nillable

Field Name	Details
	Description If the asset token request included an actor token, the payload portion containing claims about the connected device, asset token, and if applicable, the registered Asset.
`AssetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Asset record if the Asset was newly created or an existing Asset was linked to in the asset token request.
`AssetName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If specified in the actor token, the display name of the existing Asset. This value is otherwise `null`.
`AssetSerialNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If specified in the actor token, the serial number of the existing Asset. This value is otherwise `null`.
`ConnectedAppId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the connected app associated with the access token for the device.
`DeviceId`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description ID of the connected device. Value is the `did` (device ID) claim specified in the actor token.
`DeviceKey`	**Type** textarea **Properties** Nillable **Description** If specified in the actor token, the device-specific RSA public key as a JSON Web Key (JWK). Value is the `jwk` claim within the confirmation claim from the actor token.
`Expiration`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The expiration time on or after which the asset token JWT must not be accepted for processing. A numeric value representing the number of seconds from 1970-01-01T00:00:00Z UTC until the specified UTC date/time, ignoring leap seconds.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Display name of the asset token.
`ReplayId`	**Type** string **Properties** Filter, Nillable, Sort **Description** Numeric ID that identifies the asset token event. Each ID is incremented automatically and guaranteed to be higher than the ID of the previous event, but not necessarily contiguous for consecutive events.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description ID of the user associated with the access token.

Usage

The following example shows how to trigger an action after an asset token event.

```
trigger AssetTokenEventTrigger on AssetTokenEvent (after insert) {
      System.assertEquals(1,Trigger.new.size(),'One record expected');
      AssetTokenEvent event = Trigger.new[0];
      AssetTokenRecord__c record = new AssetTokenRecord__c();
      record.ConnectedAppId__c = event.ConnectedAppId;
      record.UserId__c = event.UserId;
      record.AssetId__c = event.AssetId;
      record.AssetTokenName__c = event.AssetTokenName;
      record.DeviceId__c = event.DeviceId;
      record.DeviceKey__c = event.DeviceKey;
      record.Expiration__c = event.Expiration;
      record.AssetSerialNumber__c = event.AssetSerialNumber;
      record.AssetName__c = event.AssetName;
      record.ActorTokenPayload__c = event.ActorTokenPayload;
      insert(record);
}
```

AssignedResource

Represents a service resource who is assigned to a service appointment. Assigned resources appear in the Assigned Resources related list on service appointments. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`ActualTravelTime`	**Type** double

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The number of minutes that the service resource needed to travel to the service appointment they're assigned to. You can enter a value with up to two decimal places.
`AssignedResourceNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the resource assignment.
`EstimatedTravelTime`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated number of minutes needed for the service resource to travel to the service appointment they're assigned to. You can enter a value with up to two decimal places.
`ServiceAppointmentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service appointment that the resource is assigned to.
`ServiceCrewId`	**Type** reference **Properties** Create, Update, Filter, Group, Sort, Nillable **Description** The service crew that the resource is assigned to. Note: Since service resources can represent crews or individuals, appointment are typically assigned to crews in the following way: **1.** Create a service resource of the Crew type that represent the crew. **2.** Create an assigned resource on the service appointment and select the crew resource in the `ServiceResourceId` field.

Field Name	Details
	As an alternative, you can assign appointments to crew members separately. This lets you track each member's travel time and see a list of the crew members in the Assigned Resources related list. To take this approach, create an assigned resource for each crew member. List the crew member in the `ServiceResourceId` field and the crew they belong to in the `ServiceCrewId` field.
`ServiceResourceId`	**Type** reference **Properties** Create, Update, Filter, Group, Sort **Description** The resource who is assigned to the service appointment.

Usage

You can assign multiple service resources to a service appointment. Service resources who are assigned to service appointments cannot be deactivated until they are removed from the appointments.

AssignmentRule

Represents an assignment rule associated with a Case or Lead.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Special Access Rules

- This object is read only. Assignment rules are created, configured, and deleted in the user interface.
- Customer Portal users can't access this object.

Fields

Field	Details
`Active`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether this assignment rule is active (`true`) or not (`false`).
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of this assignment rule.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of assignment rule—Case or Lead.

Usage

Before creating or updating a new Case or Lead, a client application can query (by name) the AssignmentRule to obtain the ID of the assignment rule to use, and then assign that ID to the `assignmentRuleId` field of the AssignmentRuleHeader. The AssignmentRuleHeader can be set using either SOAP API or REST API.

SEE ALSO:

Object Basics

AssociatedLocation

Represents a link between an account and a location in Field Service Lightning. You can associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
ActiveFrom	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date and time the associated location is active.
ActiveTo	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date and time the associated location stops being active.
AssociatedLocationNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Auto-generated number identifying the associated location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the associated location was last modified.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the associated location was last viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The location associated with the address.
`ParentRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The account associated with the location.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Picklist of address types. The values are: • Bill To • Ship To

AsyncApexJob

Represents an individual Apex sharing recalculation job, a batch Apex job, a method with the `future` annotation, or a job that implements `Queueable`.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ApexClassID`	**Type** reference, **Properties** Filter, Group, Sort **Description** The ID of the Apex class executing the job. Label is `Class ID`.

Field Name	Details
CompletedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the job was completed.
ExtendedStatus	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If one or more errors occurred during the batch processing, this contains a short description of the first error. A more detailed description of that error, along with any subsequent errors, is emailed to the last user who modified the batch class. This field is available in API version 19.0 and later.
JobItemsProcessed	**Type** int **Properties** Filter, Group, Sort **Description** Number of job items processed. Label is `Batches Processed`.
JobType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of job being processed. Valid values are: • `Future` • `SharingRecalculation` • `ScheduledApex` • `BatchApex` • `BatchApexWorker` • `TestRequest` • `TestWorker` • `ApexToken` • `Queueable`

Field Name	Details
MethodName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the Apex method being executed. Label is `Apex Method`.
NumberOfErrors	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of batches with a failure. A batch is considered transactional, so any unhandled exceptions constitute an entire failure of the batch. Label is `Failures`.
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the job. Valid values are: • `Holding`[1] • `Queued` • `Preparing` • `Processing` • `Aborted` • `Completed` • `Failed` [1] This status applies to batch jobs in the Apex flex queue.
TotalJobItems	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of batches processed. Each batch contains a set of records. Label is `Total Batches`.

Usage

Use this object to query Apex batch jobs in your organization.

AttachedContentDocument

This read-only object contains all `ContentDocument` objects associated with an object.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the attached `ContentDocument`.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.
`ExternalDataSourceName`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
`ExternalDataSourceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in APIAPI version 35.0 and later.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the attached `ContentDocument`. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.
`LinkedEntityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the record the `ContentDocument` is attached to.
`SharingOption`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** Title of the attached `ContentDocument`.

Usage

Use this object to list all `ContentDocument` objects attached to an object via a feed post.

To retrieve `ContentDocument` objects, issue a describe call on an object, which returns a query result for each activity since the record was created. You can't directly query this object.

AttachedContentNote

This read-only object contains all ContentNote objects associated with an object. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`

Special Access Rules

- Notes must be enabled.
- Chatter must be enabled.

Fields

Field Name	Details
ContentDocumentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the attached `ContentNote`
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the note in bytes.
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the attached `ContentNote`.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of file for the note. All notes have a file type of `SNOTE`.
LinkedEntityId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the record the `ContentNote` is attached to.
TextPreview	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** A preview of the note, up to 255 characters.
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** Title of the note.

Usage

Use this object to list all `ContentNote` objects attached to an object.

To retrieve `ContentNote` objects, issue a describe call on an object, which returns a query result for each note created or attached. You can't directly query this object.

Attachment

Represents a file that a User has uploaded and attached to a parent object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create, Update **Description** Required. Encoded file data.
`BodyLength`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Size of the file (in bytes).
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field’s value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`ContentType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The content type of the attachment. If the `Don't allow HTML uploads as attachments or document records` security setting is enabled for your organization, you cannot upload files with the following file extensions: `.htm`, `.html`, `.htt`, `.htx`, `.mhtm`, `.mhtml`, `.shtm`, `.shtml`, `.acgi`, `.svg`.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the attachment. Maximum size is 500 characters. This field is available in API version 18.0 and later.

Field	Details
IsEncrypted	**Note:** This information is about Shield Platform Encryption and not Classic Encryption. **Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the attachment is encrypted using Shield Platform Encryption (`true`) or not (`false`). This field is available in API version 34.0 and later.
IsPartnerShared	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether this record is shared with a connection using Salesforce to Salesforce. Label is `Is Shared With Partner`.
IsPrivate	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is viewable only by the owner and administrators (`true`) or viewable by all otherwise-allowed users (`false`). During a create or update call, it is possible to mark an Attachment record as private even if you are not the owner. This can result in a situation in which you can no longer access the record that you just inserted or updated. Label is **Private**. Attachments on tasks or events can't be marked private.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of the attached file. Maximum size is 255 characters. Label is **File Name**.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description ID of the User who owns the attachment. This field was required previous to release 9.0. Beginning with release 9.0, it can be null on create. The owner of an attachment on a task or event must be the same as the owner of the task or event.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the parent object of the attachment. The following objects are supported as parents of attachments: • Account • Asset • Campaign • Case • Contact • Contract • Custom objects • EmailMessage • EmailTemplate • Event • Lead • Opportunity • Product2 • Solution • Task

Note: If you are importing Attachment data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. For example, for compliance reasons, you may prefer to set the `CreatedDate` to the date the record was originally created in your system, rather than the date it was imported into Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

The API sends and receives the binary file attachment data encoded as a base64Binary data type. Prior to creating a record, client applications must encode the binary attachment data as base64. Upon receiving a response, client applications must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

The create call restricts these files to a maximum size of 25 MB. For a file attached to a Solution, the limit is 1.5 MB. The maximum email attachment size is 3 MB.

The API supports attachments on email in create, delete, or update calls. The query call does not return attachments parented by email, unless the user performing the query has the “Modify All Data” permission.

Note:

- Attachment records are not searched during text searches.
- When issued by an administrator, the query results include Attachment records from the Recycle Bin.
- When issued by a non-administrator, the `queryAll()` call results do not include Attachment records from the Recycle Bin.

Access to fields depends on the method being used:

- All of the fields are accessible using the `describeSObjects()` and `query()` calls. With the `create()` call, you can insert the `Name`, `ParentId`, `Body`, `IsPrivate`, and `OwnerId` fields.
- To modify existing records, the `update()` call gives you access to change the `Name`, `Body`, `IsPrivate`, and `OwnerId` fields.
- You can access all of the fields using a `query()` call. However, you can't receive the `Body` field for multiple records in a single `query()` call. If your query returns the `Body` field, your client application must ensure that only one row with one Attachment is returned; otherwise, an error occurs. A more effective approach is to return IDs (but not Attachment records in the `Body` field) from a `query()` call and then pass them into `retrieve()` calls that return the `Body` field.
- For information about accessing the attachments of archived activities, see Archived Activities.

SEE ALSO:

Note

AuraDefinition

Represents a Lightning definition, such as component markup, a client-side controller, or an event. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AuraDefinitionBundleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the bundle containing the definition. A bundle contains a Lightning definition and all its related resources.

Field Name	Details
DefType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The definition type. Valid values are: • APPLICATION — Lightning Components app • CONTROLLER — client-side controller • COMPONENT — component markup • EVENT — event definition • HELPER — client-side helper • INTERFACE — interface definition • RENDERER — client-side renderer • STYLE — style (CSS) resource • PROVIDER — reserved for future use • MODEL — deprecated, do not use • TESTSUITE — reserved for future use • DOCUMENTATION — documentation markup • TOKENS — tokens collection • DESIGN — design definition • SVG — SVG graphic resource
Format	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The format of the definition. Valid values are: • XML for component markup • JS for JavaScript code • CSS for styles
Source	**Type** textarea **Properties** Create, Update **Description** The contents of the Lightning definition. This is all the markup or code for the definition.

Usage

For more information, see the Lightning Components Developer Guide.

AuraDefinitionBundle

Represents a Lightning definition bundle, such as a component or application bundle. A bundle contains a Lightning definition and all its related resources. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The API version for this bundle. Every bundle has an API version specified at creation.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Sort, Update **Description** The text description of the bundle. Maximum size of 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Master label for the Lightning bundle. This internal label doesn’t get translated.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field’s value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Usage

For more information, see the Lightning Components Developer Guide.

AuthConfig

Represents authentication options for a communityor custom domain that was created by using My Domain. This object is available in API version 32.0 and later.

The fields for this object control the login options that show up on the login page for users of a community or custom domain.

- Logging in with a username and password
- Using SAML for single sign-on
- Authentication provider logins from a third-party service, such as Facebook or Twitter

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have "View Setup and Configuration" permission to view the settings.

Fields

Field Name	Details
`AuthOptionsAuthProvider`	**Type** boolean **Properties** Filter **Description** If `true`, at least one Auth. Provider is selected to show up on the login page, and this object has child AuthConfigProvider objects for each provider.
`AuthOptionsSaml`	**Type** boolean **Properties** Filter **Description** If `true`, at least one SAML configuration is selected to show up on the login page. If the organization has only one SAML configuration, this value indicates whether that configuration is selected to show up on the login page. If the organization has multiple SAML configurations, see the child AuthConfigProvider objects for each configuration.
`AuthOptionsUsernamePassword`	**Type** boolean

Field Name	Details
	Properties Filter **Description** If `true`, the login option for a username and password appears on the login page.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the domain created using My Domain or, for communities, a concatenated string of *`community name_community prefix`*.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether this configuration is in use.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the organization.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The text that's used to identify the Visualforce page in Setup.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The organization type for this object. • `Org` (includes custom domains) • `Community` • `Site` • Portal
`Url`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The login URL of the organization for this AuthConfig object. Each URL has only one associated AuthConfig object.

AuthConfigProviders

Represents an authentication provider that's configured in an organization. This object is a child of the AuthConfig object. This object is available in API version 32.0 and later.

This object links the authentication configuration for an organization to the Auth. Provider through the `AuthOptionsAuthProvider` field of the AuthConfig object. The login page of a Community or custom domain that was created by using My Domain can allow multiple SAML configurations and multiple authentication providers. These configurations can be set to show up as buttons on the login page. Each configuration has an AuthConfigProvider object.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You must have "View Setup and Configuration" permission to view the settings.

Fields

Field Name	Details
`AuthConfigId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for this configuration.
`AuthProviderId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Auth. Provider or SAML configuration.

AuthProvider

Represents an authentication provider in your org.

An authentication provider enables users to log in to your Salesforce org using their login credentials from an external service provider, such as Facebook© or Janrain©.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Only users with the “Customize Application” and “Manage AuthProviders” permissions can access this object.

Fields

Field Name	Details
`AuthorizeUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Required, but only if `ProviderType` is `OpenIdConnect`. The OAuth authorization endpoint URL. Used only with OpenID Connect authentication providers. Available in API version 29.0 and later.
`ConsumerKey`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Required. The app’s key that is registered at the third-party Single Sign-On provider.
`ConsumerSecret`	**Type** string **Properties** Create, Nillable **Description** Required. The consumer secret of the app that is registered at the third-party Single Sign-On provider. This field cannot be updated. When using `create()` this field must be encrypted. To create an encrypted form of the consumer secret from plain text: **1.** Create an authentication provider with the ConsumerSecret plain text value. **2.** Save the authentication provider. **3.** Create an outbound change set that includes the authentication provider component. The new change set .xml file has an entry in the form `<consumerSecret>++XYZ++</consumerSecret>` where ++XYZ++ is the encrypted secret.
`CustomMetadataTypeRecord`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Required, but only with custom authentication provider plug-ins, when `ProviderType` is `Custom`. The API name of the authentication provider. Available in API version 36.0 and later.
`DefaultScopes`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Required, but only if `ProviderType` is `OpenIdConnect` The scopes to be sent with the authorization request, if not specified when a flow is started. Used only with OpenID Connect authentication providers. Available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Used when referring to the authentication provider from a program.
`ErrorUrl`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A custom error URL for the authentication provider to use to report any errors.
`ExecutionUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user that runs the Apex handler class. The user must have the "Manage Users" permission. A user is required when you specify a registration handler class.
`FriendlyName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. A user-friendly name for the provider.
`IconUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** The path to an icon to use as a button on the login page. Users click the button to log in with the associated authentication provider.
`IdTokenIssuer`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Only available if `ProviderType` is `OpenIdConnect`. This value identifies the source of the authentication token in the form *`https: URI`*. Used only with OpenID Connect authentication providers. If provided, Salesforce validates the returned `id_token` value. The OpenID Connect specification requires an `id_token` value to be returned with the `access_token` value. Available in API version 30.0 and later.
`LinkKickoffUrl`	**Type** url **Properties** Nillable **Description** Provides the URL for linking existing Salesforce users to a third-party account. This field is read-only. Available in API version 43.0 and later.
`LogoutUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Provides a specific destination for users after they log out if they authenticated using social sign-on. The URL must be fully qualified with an `http` or `https` prefix, such as `https://acme.my.salesforce.com`. Available in API version 33.0 and later.

Field Name	Details
`OauthKickoffUrl`	**Type** url **Properties** Nillable **Description** Provides the URL for obtaining OAuth access tokens for a third party. This field is read-only. Available in API version 43.0 and later.
`OptionsIncludeOrgIdInId`	**Type** boolean **Properties** Create, Filter, Update **Description** Includes the organization ID to differentiate between users with the same user ID from two sources (such as two sandboxes). Only available for Salesforce authentication providers. Once set to `true`, it can't be set to `false`. Available in API version 32.0 and later.
`OptionsSendAccessTokenInHeader`	**Type** boolean **Properties** Create, Filter, Update **Description** Required only if `ProviderType` is `OpenIdConnect`. When `true`, the access token is sent to the `UserInfoUrl` in a header instead of a query string. Used only with OpenID Connect authentication providers. Available in API version 30.0 and later.
`OptionsSendClientCredentialsInHeader`	**Type** boolean **Properties** Create, Filter, Update **Description** Required only if `ProviderType` is `OpenIdConnect`. When `true`, the client credentials are sent in a header, instead of a query string, to the `tokenUrl`. The credentials are in the standard OpenID Connect Basic Credentials header form, which is `Basic <token>`, where `<token>` is the base64-encoded string `"clientkey:clientsecret"`. Used only with OpenID Connect authentication providers. Available in API version 30.0 and later.
`ProviderType`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The third-party Single Sign-On provider to use. Valid values are: • `Facebook` • `Salesforce` • `Janrain` • `LinkedIn` (Available in API version 32.0 and later.) • `Twitter` (Available in API version 32.0 and later.) • `OpenIdConnect` (Available in API version 29.0 and later.) Note: This type requires values for the following fields: – `AuthorizeUrl` – `DefaultScopes` – `TokenUrl` – `UserInfoUrl` • `MicrosoftACS` Microsoft Access Control Service typically provides authentication for a Microsoft Office 365 service like SharePoint® Online. (Available in API version 31.0 and later.) • `GitHub`—Use the `GitHub` provider to log in users of your Lightning Platform app to GitHub using OAuth. When logged in to GitHub, your app can make calls to GitHub APIs. The `GitHub` provider isn't available as a single sign-on provider, so users can't log in to your Salesforce org using their GitHub login credentials. (Available in API version 35.0 and later.) • `Custom` (Available in API version 36.0 and later.)
`PluginId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An existing Apex class that extends the `Auth.AuthProviderPluginClass` abstract class. Available in API version 39.0 and later.
`RegistrationHandlerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description An existing Apex class that implements the `Auth.RegistrationHandler` interface.
`SsoKickoffUrl`	**Type** url **Properties** Nillable **Description** Provides the URL for performing single sign-on into Salesforce from a third party by using its third-party credentials. This field is read-only. Available in API version 43.0 and later.
`TokenUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Required, but only if `ProviderType` is `OpenIdConnect`. The OAuth token endpoint URL. Used only with OpenID Connect authentication providers. Available in API version 29.0 and later.
`UserInfoUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort, Update **Description** Required, but only if `Provider-type` is `OpenIdConnect`. The OpenID Connect endpoint URL. Used only with OpenID Connect authentication providers. Available in API version 29.0 and later.

AuthSession

The AuthSession object represents an individual user session in your organization. This object is available in versions 29.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** The date and time this session was created. This field is a standard system field.
IsCurrent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the session is a member of the user's current session family. This field is available in API version 37.0 and later.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** The date and time this session was last updated. A session expires when the current date and time equals `LastModifiedDate` + `NumSecondsValid`. This field is a standard system field.
LoginGeoId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) can vary. This field is available in API version 34.0 and later.
LoginHistoryId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The 18-character ID for a successful login event. When a session is reused, Salesforce updates the `LoginHistoryId` with the value from the most recent login. This field is available in API version 33.0 and later.
`LoginType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of login, for example, Application.
`LogoutUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The page or view to display after users log out of a community, or an organization if they authenticated using SAML. This field is available in API version 32.0 and later.
`NumSecondsValid`	**Type** int **Properties** Filter, Group, Sort **Description** The number of seconds before the session expires, starting from the last update time.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The 18-character ID for the parent session, if one exists (for example, if the current session is for a canvas app). If the current session doesn’t have a parent, this value is the current session’s own ID.
`SessionSecurityLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description Standard or High, depending upon the authentication method used.
`SessionType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of session. Common ones are UI, Content, API, and Visualforce.
`SourceIp`	**Type** string **Properties** Filter, Group, Sort **Description** IP address of the end user's device from which the session started. This address can be an IPv4 or IPv6 address.
`UserType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The kind of user for this session. Types include Standard, Partner, Customer Portal Manager, High Volume Portal, and CSN Only.
`UsersId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The user's Salesforce user ID.

Usage

The AuthSession object exposes session data and enables read and delete operations on that data. For example, use this object to create a report showing who is signed in to your organization, or to create a tool to delete a session, ending that user's session. For a user, only their own sessions are available, while administrators can see all sessions.

You can't change user sessions with this object. You can only read and delete them.

BackgroundOperation

Represents a background operation in an asynchronous job queue. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Error`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error message for the operation. Applies only if the operation has an error status.
`ExecutionGroup`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Identifies the execution group.
`ExpiresAt`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** After this time, the operation is removed from the asynchronous job queue. Applies only if the operation has a status of complete, canceled, error, or merged.
`FinishedAt`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** When the operation reached the status of completed or error.

Field Name	Details
GroupLeaderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Identifies the operation that's selected as the leader of the execution group.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Identifies the background operation.
NumFollowers	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Number of other operations that are in the execution group.
ParentKey	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** Tag that identifies related sets of operations, if any.
ProcessAfter	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The operation is scheduled to be processed after this time.
RetryBackoff	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Applies only if the operation has an error status. The first retry is attempted immediately. Each subsequent retry is increasingly delayed according to an exponential expression that's multiplied by the `RetryBackoff`, in milliseconds. Specifically, the delay time is $(2^{n}-1) \times R$, where `n` is the `RetryCount`, and `R` is the `RetryBackoff`. The default value for `RetryBackoff` depends on the type of operation. For example, the `RetryBackoff` default for write operations on external objects is 1,000 milliseconds. For write operations, retries are attempted immediately, after 3 seconds, after 7 seconds, after 15 seconds, and so on.
`RetryCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of attempted retries. Applies only if the operation has an error status.
`RetryLimit`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Maximum number of retries to attempt. Applies only if the operation has an error status.
`SequenceGroup`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Identifies the sequence group. Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Within an execution group, operations can be placed into a sequence group to be executed in a specific order.
`SequenceNumber`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Order position within the sequence group. Applies only if the operation is merged with other operations into an execution group to be processed in bulk. Within an execution group, operations can be placed into a sequence group to be executed in a specific order.
StartedAt	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** When the operation started running.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Status of the background operation. The options are: • New • Scheduled • Canceled • Merged • Waiting • Running • Error • Complete
SubmittedAt	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** When the operation was added to the job queue.
Timeout	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Maximum time in milliseconds to wait for results after the operation started running.
`WorkerUri`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** URI of the worker that performed the operation. Example for a Salesforce Connect OData operation: `services/data/v35.0/xds/upsert`

Usage

The BackgroundOperation object lets you:

- Monitor the job status of asynchronous operations.
- View errors that are related to the asynchronous operations.
- Extract statistics for the asynchronous job queue.

BackgroundOperationResult

Stores error messages generated when running Async SOQL queries or importing data into big objects using Bulk API. This is a big object, available in API version 37.0 and later.

Each instance of `BackgroundOperationResult` represents one error. The `Message` field stores the text of the error message. The `ParentID` field stores the:

- job ID of the query, in case of Async SOQL
- batch ID for the data import, in case of Bulk API

Bulk API validates data at the time of import, and generates an error message for the first occurrence of invalid data in any row of the data file. The validation performed depends on the type of data being imported.

- **Text**—The length of the input string must be less than or equal to the length of the corresponding text field in the target object.
- **Number**—The input data must be a number, whose scale and precision are compatible with the corresponding number field in the target object.
- **ID—**The input data must be a valid 15- or 18-character ID.
- **DateTime**—The input data must be a valid dateTime value, in the approved format.
- **Lookup**—The lookup value must be a valid 15- or 18-character ID.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`CreatedById`	**Type** ID **Properties** Nillable **Description** The user ID of the user initiating the Bulk API or Async SOQL request.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create **Description** The date and time at which the Bulk API or Async SOQL request was made.
`Data`	**Type** string **Properties** Nillable **Description** The data that generated the error message. The total length is limited to 2,000 characters, and each column can occupy a maximum of 50 characters. Any data exceeding those limits is truncated.
`Id`	**Type** ID **Properties** Defaulted on create, idLookup **Description** The ID of the error message.
`Message`	**Type** string **Properties** Nillable **Description** The text of the error message.

Field Name	Details
MessageType	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The type of error message. The possible values are: ERROR, WARNING, or INFO.
ParentId	**Type** reference **Properties** Filter, Sort **Description** The batch ID, in case of Bulk API, or the job ID, in case of Async SOQL.

Usage

You can check for errors by querying the `BackgroundOperationResult` object. For example, this query returns details of all errors in a data file imported using Bulk API, whose batch ID is `751xx000000060AAQ`.

```
SELECT CreatedbyId, CreatedDate, Id, Message, MessageType, ParentId FROM
BackgroundOperationResult WHERE ParentId = "751xx000000060AAQ"
```

Note: You can only view errors resulting from Async SOQL or Bulk API requests that you initiated, unless you have the global permission to view all data.

Bookmark

Represents a link between opportunities that share common information.

This object is available to organizations with the Similar Opportunities feature enabled.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
ID	**Type** ID **Properties** Defaulted on create, Filter

Field	Details
	Description ID of the bookmark. Label is **Bookmark ID**.
`FromId`	**Type** ID **Properties** Filter **Description** The originating opportunity. Label is **Bookmarked From ID**
`ToId`	**Type** ID **Properties** Filter **Description** The opportunity to which the originating opportunity is linked. Label is **Bookmarked To ID**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Usage

The Bookmark object works with the Opportunity object only.

Use this read-only object to query the bookmarks between opportunities in your organization. In the online application, users can search for opportunities that share attributes with their opportunity. The user can then bookmark the appropriate opportunities for future reference.

BrandTemplate

Letterhead for HTML EmailTemplate.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the letterhead. Limited to 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Letterhead Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the letterhead is available for use (`true`) or not (`false`). Label is **Active**.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the template as it appears in the user interface. Limited to 255 characters. Label is **Brand Template Name**.

Field	Details
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.
`Value`	**Type** textarea **Properties** Create, Update **Description** The contents of the letterhead, in HTML, including any logos.

Usage

Use this object to brand EmailTemplate records with your letterhead. You can also set a brand template to active or inactive. For example, if you have five different marketing brands, you can maintain each different brand in one template, and assign to the appropriate EmailTemplate.

SEE ALSO:

EmailTemplate

BusinessHours

Specifies the business hours of your support organization. Escalation rules are run only during these hours.

If business hours are associated with any Holiday records, then business hours and escalation rules associated with business hours are suspended during the dates and times specified as holidays.

Supported Calls

`create()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`, `describeLayout()`, `search()`

Special Access Rules

All users, even those without the "View Setup and Configuration" user permission, can view business hours via the API.

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable,Sort **Description** ID of the BusinessHours associated with the SlaProcess.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the business hours is active (`true`) or not active (`false`).
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the business hours.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the business hours are set as the default business hours (`true`) or not (`false`).

Field	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the business hours were last viewed.
FridayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
FridayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
MondayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
MondayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
SaturdayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.

Field	Details
SaturdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
SundayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
SundayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
ThursdayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
ThursdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
TimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The time zone of the business hours.

Field	Details
TuesdayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
TuesdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.
WednesdayEndTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business closes.
WednesdayStartTime	**Type** time **Properties** Create, Filter, Nillable, Sort, Update **Description** Time that business opens.

Usage

Use this object to specify the business hours at which your support team operates. Escalation rules only run during the business hours with which they are associated. To set business hours to 24-hours a day, set the times from midnight to midnight (00:00:00 ~ 00:00:00) on each day.

By default, business hours are set from 12:00 AM to 12:00 AM in the default time zone specified in your organization's profile.

SEE ALSO:

Object Basics

BusinessProcess

Represents a business process.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users cannot access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of this business process. Limit: 255 characters.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this business process can be presented to users in the Salesforce user interface (`true`) or not (`false`) when creating a new record type or changing the business process of an existing record type.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of this business process. Limit: 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`TableEnumOrId`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. One of the following values: Case, Opportunity, or Solution. Label is **Entity Enumeration Or ID**.

Usage

Use the BusinessProcess object to offer different subsets of picklist values to different users for the LeadStatus, CaseStatus, and OpportunityStage fields. Similar to a RecordType, a BusinessProcess identifies the type of a row in a Case, Lead, or Opportunity and implies a subset of picklist values for these three fields. The values for the remaining picklist fields are driven off of RecordType.

SEE ALSO:

Object Basics

CallCenter

Represents a call center, which is a logical representation of a single computer-telephony integration (CTI) system instance in an organization.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AdapterURL`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** An optional field that specifies the location of where the CTI adapter is hosted. For example, `http://localhost:11000`. This field is available in API version 23.0 or later.
`CustomSettings`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Specifies settings in the call center definition file, such as whether the call center uses the Open CTI, and SoftPhone properties, such as height in pixels. This field is available for Open CTI and in API version 25.0 or later.
`Id`	**Type** ID **Properties** Defaulted on create, Filter **Description** System field that uniquely identifies this call center. Label is **Call Center ID**. This ID is created automatically when the call center is created.
`InternalName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The internal name of the call center. Limit is 80 characters.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the call center. Limit is 80 characters.
`Version`	**Type** double **Properties** Create, Filter, Nillable, Sort **Description** The version of the CTI Toolkit used to create the call center (for versions 2.0 and later). This field is available in API version 18.0 and later.

Usage

Create a call center or query an existing call center.

Campaign

Represents and tracks a marketing campaign, such as a direct mail promotion, webinar, or trade show.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ActualCost`	**Type** currency

Field	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Amount of money spent to run the campaign.
`AmountAllOpportunities`	**Type** currency **Properties** Filter, Sort **Description** Amount of money in all opportunities associated with the campaign, including closed/won opportunities. Label is **Value Opportunities in Campaign**.
`AmountWonOpportunities`	**Type** currency **Properties** Filter, Sort **Description** Amount of money in closed or won opportunities associated with the campaign. Label is **Value Won Opportunities in Campaign**.
`BudgetedCost`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of money budgeted for the campaign.
`CampaignImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the campaign image. Available in API version 42.0 and later.
`CampaignMemberRecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record type ID for CampaignMember records associated with the campaign.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the campaign. Limit: 32 KB. Only the first 255 characters display in reports.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Ending date for the campaign. Responses received after this date are still counted.
ExpectedResponse	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** Percentage of responses you expect to receive for the campaign.
ExpectedRevenue	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of money you expect to generate from the campaign.
HierarchyActualCost	**Type** currency **Properties** Filter, Nillable, Sort

Field	Details
	Description Calculated field for the total amount of money spent to run the campaigns in a campaign hierarchy. Label is **Total Actual Cost in Hierarchy**.
`HierarchyBudgetedCost`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated field for the total amount of money budgeted for the campaigns in a campaign hierarchy. Label is**Total Budgeted Cost in Hierarchy**.
`HierarchyExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated field for the total amount of money you expect to generate from the campaigns in a campaign hierarchy. Label is **Total Expected Revenue in Hierarchy**.
`HierarchyNumberSent`	**Type** int **Properties** Filter **Description** Calculated field for the total number of individuals targeted by the campaigns in a campaign hierarchy. For example, the number of email messagess sent. Label is **Total Num Sent in Hierarchy**.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this campaign is active (`true`) or not (`false`). Default value is `false`. Label is **Active**.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of the campaign. Limit: is 80 characters.
`NumberOfContacts`	**Type** int **Properties** Filter, Group, Sort **Description** Number of contacts associated with the campaign. Label is **Total Contacts**.
`NumberOfConvertedLeads`	**Type** int **Properties** Filter, Group, Sort **Description** Number of leads that were converted to an account and contact due to the marketing efforts in the campaign. Label is **Converted Leads**.

Field	Details
NumberOfLeads	**Type** int **Properties** Filter, Group, Sort **Description** Number of leads associated with the campaign. Label is **Leads in Campaign**.
NumberOfOpportunities	**Type** int **Properties** Filter, Group, Sort **Description** Number of opportunities associated with the campaign. Label is **Opportunities in Campaign**.
NumberOfResponses	**Type** int **Properties** Filter, Group, Sort **Description** Number of contacts and unconverted leads with a Member Status equivalent to "Responded" for the campaign. Label is **Responses in Campaign**.
NumberOfWonOpportunities	**Type** int **Properties** Filter, Group, Sort **Description** Number of closed or won opportunities associated with the campaign. Label is **Won Opportunities in Campaign**.
NumberSent	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Number of individuals targeted by the campaign. For example, the number of emails sent. Label is **Num Sent**.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description ID of the user who owns this campaign. Default value is the user logging in to the API to perform the create.
ParentCampaign	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** The campaign above the selected campaign in the campaign hierarchy.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent Campaign record, if any.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Starting date for the campaign.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Status of the campaign, for example, Planned, In Progress. Limit: 40 characters.
TotalAmountAllOpportunities	**Type** currency

Field	Details
	Properties Filter **Description** Calculated field for total amount of all opportunities associated with the campaign hierarchy, including closed/won opportunities. Label is **Total Value Opportunities in Hierarchy**.
`TotalAmountAllWonOpportunities`	**Type** currency **Properties** Filter **Description** Calculated field for amount of all closed/won opportunities associated with the campaign hierarchy. Label is **Total Value Won Opportunities in Hierarchy**.
`TotalNumberofContacts`	**Type** int **Properties** Filter **Description** Calculated field for number of contacts associated with the campaign hierarchy. Label is **Total Contacts in Hierarchy**.
`TotalNumberofConvertedLeads`	**Type** int **Properties** Filter **Description** Calculated field for the total number of leads associated with the campaign hierarchy that were converted into accounts, contacts, and opportunities. Label is **Total Converted Leads in Hierarchy**.
`TotalNumberofLeads`	**Type** int **Properties** Filter **Description** Calculated field for total number of leads associated with the campaign hierarchy. This number also includes converted leads. Label is **Total Leads in Hierarchy**.
`TotalNumberofOpportunities`	**Type** int

Field	Details
	Properties Filter **Description** Calculated field for the total number of opportunities associated with the campaign hierarchy. Label is **Total Opportunities in Hierarchy**.
`TotalNumberofResponses`	**Type** int **Properties** Filter **Description** Calculated field for number of contacts and unconverted leads that have a `Member Status` equivalent to "Responded" for the campaign hierarchy. Label is **Total Responses in Hierarchy**.
`TotalNumberofWonOpportunities`	**Type** int **Properties** Filter **Description** Calculated field for the total number of won opportunities associated with the campaign hierarchy. Label is **Total Won Opportunities in Hierarchy**.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of campaign, for example, Direct Mail or Referral Program. Limit: 40 characters.

Usage

Client applications can create, update, delete, and query Attachment records associated with a campaign via the API.

The Campaign object is defined only for those organizations that have the marketing feature enabled and valid marketing licenses. In addition, it is accessible only to those users that are enabled as marketing users. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the Campaign object.

Note: The main constituent of a campaign is a CampaignMember. You will commonly need to update campaigns with CampaignMember.

SEE ALSO:

Object Basics

CampaignFeed

Represents a single feed item in the feed on a campaign record detail page. This object is available in API version 18.0 and later.

A campaign feed shows recent changes to a campaign record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to campaigns.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Campaign object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of CampaignFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.

Field	Details
	Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator and the `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference

Field	Details
	Properties Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the campaign record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, specify `ContentData` and `ContentFileName`.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a campaign record.

SEE ALSO:

Campaign

EntitySubscription

NewsFeed

UserProfileFeed

CampaignHistory

Represents the history of changes to the values in the fields of a campaign. This object is available in versions 40.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CampaignId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the campaign. Label is **Campaign ID**.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to a campaign.

This object respects field level security on the parent object.

CampaignInfluence

Represents the association between a campaign and an opportunity in Customizable Campaign Influence. This object is available in API version 37.0 and later.

Note: This information applies only to Customizable Campaign Influence and not to Campaign Influence 1.0.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To access this object, Customizable Campaign Influence must be enabled. Customer Portal users can't access this object.

Fields

Field Name	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated campaign.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the contact on the associated opportunity.
`Influence`	**Type** percent **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The percentage of the associated opportunity's Amount field attributed to the associated campaign.
`ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the campaign influence model associated with the record.
`OpportunityId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the associated opportunity.
`RevenueShare`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The amount of revenue from the associated opportunity attributed to the associated campaign.

Usage

Use this object to create campaign influence records for your custom campaign influence models. Do not create campaign influence records for the Primary Campaign Source model. Records added to the Primary Campaign Source model via the API are deleted when the model is recalculated.

CampaignInfluenceModel

This read-only object represents a campaign influence model in Customizable Campaign Influence. Use campaign influence models to group `CampaignInfluence` records created by a specific set of triggers and workflows that you define. The Primary Campaign Source influence model is the default model. This object is available in API version 37.0 and later.

Note: This information applies only to Customizable Campaign Influence and not to Campaign Influence 1.0.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

To access this object, Customizable Campaign Influence must be enabled. Customer Portal users can’t access this object.

Fields

Field Name	Details
`DeveloperName`	**Type** string

Field Name	Details
	Properties Filter, Group, Sort **Description** The API name of the influence model. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is active. Active models can generate campaign influence records. Deactivating a model deletes its campaign influence records. Custom models are always active and this field is ignored.
`IsDefaultModel`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is the default model (`true`) or not (`false`). `CampaignInfluence` records associated with the default model appear in 3 locations. • The Campaign Influence related list on opportunities • The Influenced Opportunities related list on campaigns • The Campaign Statistics section on campaigns The value of `IsDefaultModel` can only be true for 1 model at a time.
`IsModelLocked`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the model is locked (`true`) or not (`false`). Records for locked models can only be added, updated, or deleted via the API.

Field Name	Details
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the influence model.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The label for the influence model.
ModelDescription	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The description of the influence model.
ModelType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the model is the Primary Campaign Source influence model, or a custom model. These values are the allowed. • 1: Primary Campaign Source model • 2: custom • 3: First Touch • 4: Last Touch • 5: Even Distribution
RecordPreference	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The value of this field determines when to create campaign influence records. • AllRecords: Creates records regardless of the revenue attribution percentage.

Field Name	Details
	• RecordsWithAttribution: Creates records only when the revenue attribution is greater than 0%.

CampaignMember

Represents the association between a campaign and either a lead or a contact.

Supported Calls

For API version 15.0 and earlier:`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

For API version 16.0 and later: `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Campaign to which this Lead or Contact is associated.
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city for the address of the lead or contact.
`CompanyOrAccount`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The company or account of the lead or contact.

Field	Details
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the Contact who is associated with a Campaign.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country for the address of the lead or contact.
Description	**Type** textarea **Properties** Nillable **Description** The description of the associated lead or contact.
DoNotCall	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the contact does not wish to be called.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Email address for the contact or lead.
`Fax`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Fax number for the contact or lead.
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name of the contact or lead.
`FirstRespondedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates the date on which the campaign member was first given a responded status.
`HasOptedOutOfEmail`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contact or lead would prefer not to receive email from Salesforce (`true`) or not (`false`).
`HasOptedOutOfFax`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the contact or lead does not wish to receive faxes.
`HasResponded`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the campaign member has responded to the campaign (`true`) or not (`false`). Label is **Responded**.
`LastName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name of the contact or lead.
`LeadId`	**Type** reference **Properties** Create, Filter, Group, Nillable,Sort **Description** Required. ID of the Lead who is associated with a Campaign.
`LeadOrContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated lead or contact.
`LeadOrContactOwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the owner of the associated lead or contact.
`LeadSource`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The source from which the lead was obtained.

Field	Details
MobilePhone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The mobile phone number of the lead or contact.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** First and last name of the contact or lead with which the campaign member is associated.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number of the lead or contact.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The postal code of the lead or contact.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object. To change the record type, modify the `CampaignMemberRecordTypeId` field on the associated Campaign.
Salutation	**Type** picklist **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Salutation for the lead or contact.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The state for the address of the lead or contact.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Controls the `HasResponded` flag on this object. You can't directly set the `HasResponded` flag, as it is read-only, but you can set it indirectly by setting this field in a create or update call. Each predefined value implies a `HasResponded` flag value. Each time you update this field, you implicitly update the `HasResponded` flag. In the Salesforce user interface, Marketing users can define valid status values for the `Status` picklist. They can choose one status as the default status. For each `Status` field value, they can also select which values should be counted as "Responded," meaning that the `HasResponded` flag will be set to `true` for those values. 40 character limit. Note: When creating or updating campaign members, use the text value for `Status` instead of the ID from the CampaignMemberStatus object.
`Street`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The street for the address of the lead or contact.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title for the lead or contact.

Field	Details
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the campaign member is a lead or a contact.

Note: If you are importing CampaignMember data into Salesforce and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Each record has a unique ID, and must contain either a `ContactId` or a `LeadId`, but can't contain both. Any attempt to create a single record with both results in a successful insert but only the `ContactId` will be inserted. However, you can create two separate records on a Campaign—one for the Lead and one for the Contact.

Standard fields from a Contact or Lead are associated with the CampaignMember object but you can't query them directly. To include a lead's `Phone` in your query, for example, query the field from the Lead object.

```
SELECT Id, (SELECT Phone FROM Lead)
FROM CampaignMember
```

This object is defined only for those organizations that have the marketing feature and valid marketing licenses. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the CampaignMember object.

In API version 16.0 and later, a `create()` call only creates a new record; in earlier versions, a `create()` call creates and updates records. The API determines whether a record exists with the specified `CampaignId` and either `ContactId` or `LeadId`.

Note: Only use a `ContactId` or `LeadId`, but not both, unless you want to track lead-based campaign members you convert to contacts.

If the record does not exist for the given `ContactId` or `LeadId`, then a new record is created. If the record exists, an error is returned and no update is made. To update an existing record, specify the ID of the CampaignMember record to update.

In API versions 15.0 and earlier, if you submit multiple records using a single create request, and if more than one record matches an existing record, only the first record submitted updates the existing record. If any of the submitted records match each other but do not match existing records, only the last record submitted is created.

The `upsert()` call is not supported in API version 16.0 and later. To use the `upsert()` call on this object, you must first delete all data in ID fields except the record ID.

To delete a record, specify the ID of the CampaignMember record to delete.

When creating or updating records, the `Status` field value specified in the call is verified as a valid status for the given Campaign:

- If the specified `Status` value is a valid status, the value is updated, and the `HasResponded` field is updated to either `true` or `false`, depending on the `Status` value association with `HasResponded`.

- If the specified `Status` value is not a valid status, the API assigns the default status to the `Status` field and updates the `HasResponded` field with the associated value. However, if the given Campaign does not have a default status, the API assigns the value specified in the call to the `Status` field, and the `HasResponded` field is set to `false`.

SEE ALSO:
Campaign
CampaignMemberStatus

CampaignMemberStatus

One or more member status values defined for a campaign.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

You can't delete a CampaignMemberStatus if that status is designated as the default status or if the status is currently used in a Campaign.

Fields

Field	Details
`CampaignId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the campaign associated with this member status.
`HasResponded`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this status is equivalent to “Responded” (`true`) or not (`false`). Beginning with API version 39.0, at least one `CampaignMemberStatus` on each campaign must have a `hasResponded` value of `true`.

Field	Details
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this status is the default status (`true`) or not (`false`). Beginning with API version 39.0, there must be a default CampaignMemberStatus defined for every campaign.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Label`	**Type** string **Properties** Create, Filter, Sort, Update **Description** Label for the status in the picklist. Limited to 765 characters.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update, Nillable **Description** Order where this campaign member status appears in the picklist.

Usage

Use this object to create picklist items for the member status in a campaign.

This object is defined only for those organizations that have the marketing feature and valid marketing licenses. In addition, the object is accessible only to those users that are enabled as marketing users. If the organization does not have the marketing feature or valid marketing licenses, this object does not appear in a `describeGlobal()` call, and you can't use `describeSObjects()` or `query()` with the CampaignMember object.

SEE ALSO:

Campaign

CampaignMember

CampaignOwnerSharingRule

Represents the rules for sharing a campaign with User records other than the owner or anyone above the owner in the role hierarchy.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CampaignAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With

Field	Details
	this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. ACampaign owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for campaigns.

SEE ALSO:

Metadata API Developer Guide: SharingRules

CampaignShare

Represents a sharing entry on a Campaign.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`CampaignId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Campaign associated with this sharing entry. This field can't be updated.
`CampaignAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Campaign. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for creating or updating records.) This field must be set to an access level that is higher than the organization's default access level for Campaign.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values: • `Rule`—The User or Group has access via a Campaign sharing rule. • `Manual`—The User or Group has access because a User with "`All`" access manually shared the Campaign with them. • `Owner`—The User is the owner of the Campaign.

Field	Details
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Campaign. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Campaign records owned by other users.

CampaignTag

Associates a word or short phrase with a Campaign.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.

Field Name	Details
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

CampaignTag stores the relationship between its parent TagDefinition and the Campaign being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Case

Represents a case, which is a customer issue or problem.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with this case.
`BusinessHoursId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the business hours associated with this case.
`Comments`	**Type** reference **Properties** Create, Delete, Layout, Nillable, Query, Retrieve, Search, Sort, Undelete, Update **Description** Used to insert a new CaseComment. Email textarea has a length of 4000 chars.
`CaseNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Assigned automatically when each case is inserted. It can't be set directly, and it can't be modified after the case is created.
`ClosedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the case was closed.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Community (Zone) associated with this case. This field is available in API version 24.0 and later.

Field	Details
ConnectionReceivedId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
ContactEmail	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** Email address for the Contact. The Case.ContactEmail field displays the Email field on the contact on page 564 that is referenced by Case.ContactId. Label is `Contact Email`. This field is available in API version 38.0 and later.
ContactFax	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Fax number for the Contact. Label is `Contact Fax`. This field is available in API version 38.0 and later.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the associated Contact.

Field	Details
ContactMobile	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Mobile telephone number for the Contact. Label is `Contact Mobile`. This field is available in API version 38.0 and later.
ContactPhone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** Telephone number for the Contact. Label is `Contact Phone`. This field is available in API version 38.0 and later.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A text description of the case. Limit: 32 KB.
`FeedItemId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the question in Chatter associated with the case. This field is available in API version 33.0 and later, and is only accessible in organizations where Question-to-Case is enabled.
`HasCommentsUnreadByOwner`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a case contains comments that the case owner hasn't read (`true`) or not (`false`).
`HasSelfServiceComments`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a case has comments added by a Self-Service user (`true`) or not (`false`).
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the case is closed (`true`) or open (`false`). This field is controlled by the `Status` field; it can't be set directly. Label is `Closed`.
`IsClosedOnCreate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the case was closed at the same time that it was created (`true`) or not (`false`). This flag is read-only and is automatically set when a record is created. It can't be set to `true` unless the `IsClosed` flag is also `true`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsEscalated`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the case has been escalated (`true`) or not. A case's escalated state does not affect how you can use a case, or whether you can query, delete, or update it. You can set this flag via the API. Label is `Escalated`.
`IsSelfServiceClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the case is closed for Self-Service users (`true`) or not (`false`).
`IsStopped`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether an entitlement process on a case is stopped (`true`) or not (`false`).
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the case can be viewed in the Customer Service Portal, Partner Service Portal, and Self-Service Portal (`true`) or not (`false`). This field is applied for case visibility in the Partner Relationship Management, Customer Service Portal, and the earlier version of Self Service Portal. The field does not alter sharing and will not prevent usage of a direct URL to a case if a portal user has read or write access.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Origin`	**Type** picklist **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** The source of the case, such as `Email`, `Phone`, or `Web`. Label is `Case Origin`.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the contact who owns the case.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the parent case in the hierarchy. The label is `Parent Case`.

Field	Details
`Priority`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The importance or urgency of the case, such as `High`, `Medium`, or `Low`.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The question in the answers community that is associated with the case. This field does not appear if you don't have an answers community enabled.
`Reason`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The reason why the case was created, such as `Instructions not clear`, or `User didn’t attend training`.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`SlaStartDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Update **Description** Shows the time that the case entered an entitlement process. If you have the “Edit” permission on cases, you can update or reset the time if you have the “Edit” permission on cases. This field is available in API version 18.0 and later.
`SourceId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the social post source.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the case, such as “New,” “Closed,” or “Escalated.” This field directly controls the `IsClosed` flag. Each predefined `Status` value implies an `IsClosed` flag value. For more information, see CaseStatus.
`StopStartDate`	**Type** dateTime **Properties** Filter, Nillable **Description** The date and time an entitlement process was stopped on the case. This field is available in API version 18.0 and later.
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The subject of the case. Limit: 255 characters.
`SuppliedCompany`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company name that was entered when the case was created. This field can't be updated after the case has been created. Label is `Company`.
`SuppliedEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The email address that was entered when the case was created. This field can't be updated after the case has been created. Label is `Email`. If your organization has an active auto-response rule, `SuppliedEmail` is required when creating a case via the API. Auto-response rules use the email in the contact specified by `ContactId`. If no email address is in the contact record, the email specified here is used.
`SuppliedName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name that was entered when the case was created. This field can't be updated after the case has been created. Label is `Name`.
`SuppliedPhone`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The phone number that was entered when the case was created. This field can't be updated after the case has been created. Label is `Phone`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of case, such as `Feature Request` or `Question`.

Note: If you are importing Case data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use the Case object to manage cases for your organization. Client applications can query, update, and delete Attachment records associated with a case via the API.

Assignment Rules

When you query or update a case, your client application can have the case automatically assigned to one or more User records based on assignment rules that have been configured in the user interface. To use this feature, your client application must set either of the following options (but not both) in the AssignmentRuleHeader used in the create or update:

Field	Field Type	Details
`assignmentRuleId`	reference	ID of the assignment rule to use. Can be an inactive assignment rule. If unspecified and `useDefaultRule` is `true`, then the default assignment rule is used. To find the ID for a given assignment rule, query the AssignmentRule object (specifying `RuleType="caseAssignment"`), iterate through the returned AssignmentRule objects, find the one you want to use, retrieve its ID, and then specify its ID in this field in the AssignmentRuleHeader.
`useDefaultRule`	boolean	Specifies whether to use the default rule for rule-based assignment (`true`) or not (`false`). The default rule is assigned by users in the Salesforce user interface.

For a code example that shows setting the AssignmentRuleHeader for a Lead (which is similar to setting the AssignmentRuleHeader for a Case), see Lead.

Separating Accounts from Contacts in Cases

In releases before 8.0, the `AccountId` could not be specified, it was derived from the contact's account. This behavior will continue to be supported in future releases, but you can also now specify an `AccountId`. If you do not specify the `AccountId` during the creation of a case, the value will default to the contact's `AccountId`.

Note: When a record is updated, if the `ContactId` has not changed, then the `AccountId` is not regenerated. This prevents the API from overwriting a value previously changed in the Salesforce user interface. However, if an API call changes the `ContactId` and the `AccountId` field is empty, then the `AccountId` is generated using the contact's account.

Using `_case` with Java

Depending on the development tool you use, you might need to write your application using `_case` instead of `Case`, because `case` is a reserved word in Java.

SEE ALSO:

Account

CaseMilestone

CaseArticle

Represents the association between a Case and a KnowledgeArticle. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Access to this object is controlled by the parent Case and KnowledgeArticle. However, when querying, access is only controlled by the parent Case.

Customer Portal users can't access this object.

Fields

Field	Details
`ArticleLanguage`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The language of the article associated with the case.
`ArticleVersionNumber`	**Type** int **Properties** Create, Group, Nillable **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Case associated with the KnowledgeArticle.
`IsSharedByEmail`	**Type** int **Properties** Create, Group, Nillable **Description** Indicates that the article has been shared with the customer through an email.

Field	Details
`KnowledgeArticleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the KnowledgeArticle associated with the Case.

Usage

This object represents the association of a knowledge article with a Case. An article is associated with a case when it's relevant to a specific issue, when it helps an agent solve the case, or when the agent sends the article to a customer.

You can use this object to include case-article associations in Apex and Visualforce.

You can't update this object via the API. If you attempt to create a record that matches an existing record, the create request simply returns the existing record.

SEE ALSO:

Case

KnowledgeArticle

CaseComment

Represents a comment that provides additional information about the associated Case.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CommentBody`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text of the CaseComment. The maximum size of the comment body is 4,000 bytes. Label is **Body**.

Field	Details
ConnectionReceivedId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsNotificationSelected`	**Type** boolean **Properties** Create, Defaulted on create, Update **Description** Indicates whether an email notification is sent to the case contact when a CaseComment is created or updated. When this field is queried, it always returns null. This field is available only when the `Enable Case Comment Notification to Contacts` setting is enabled on the Support Settings page in Setup. To send email notifications for CaseComment, you must use the `EmailHeader triggerUserEmail`. Available in API version 43.0 and later.
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the CaseComment is visible to customers in the Self-Service portal (`true`) or not (`false`). Label is **Published**. This is the only CaseComment field that can be updated via the API.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, **Description** Required. ID of the parent Case of the CaseComment.

Note: If you are importing CaseComment data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

In the Salesforce user interface, comments are generally entered by a User working on a Case. All users have access to create and view CaseComment in the Salesforce user interface and when using the API. In the API, CaseComment records can't be modified after insertion unless the user has the "Modify All" object-level permission for Cases or the "Modify All Data" permission. If not, users can only update the `IsPublished` field, and can't delete CaseComment.

SEE ALSO:

Object Basics

CaseContactRole

Represents the role that a given Contact plays on a Case.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CasesId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the cases associated with this contact.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the contact.
`IsDeleted`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the role played by the contact on this contract, such as Decision Maker, Approver, Buyer, and so on. Must be unique—there can't be multiple records in which the `ContractId`, `ContactId`, and `Role` values are identical. Different contacts can play the same role on the same contract. A contact can play different roles on the same contract.

Usage

Use this object to define the role that a given Case plays on a given Contact. For example, you can use this object to be able to see all contacts who are associated to a case, or, given a contact, be able to query all cases that they are associated with, even if they are not the primary contact on the case.

CaseFeed

Represents a single feed item in the feed displayed on the detail page for a case record. A case feed shows recent changes to a case record for any fields that are tracked in feeds, and comments and posts about the record. It is a useful way to stay up-to-date with changes to cases. This object is available in API version 18.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn’t create, you must have one of these permissions:

- “Modify All Data”
- “Modify All” on the Case object
- “Moderate Chatter”

Note: Users with the “Moderate Chatter” permission can delete only the feed items and comments they see.

Fields

Field	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the CaseFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
ConnectionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator and the `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Nillable

Field	Details
	Description Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is `ContentPost`. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
FeedPostId	**Type** reference **Properties** Filter. Group, Nillable, Sort

Field	Details
	Description This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. Use FeedItem instead. The ID of the associated FeedPost. A FeedPost represents the following types of changes in a CaseFeed: status updates, changes to tracked fields, text posts, link posts, and content posts. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>`

Field	Details
	• `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` **Note:** In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on the feed item, then `LastModifiedDate` becomes the `CreatedDate` for the FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkURL`	**Type** url **Properties** Nillable, Sort **Description** The URL of the `LinkPost`.

Field	Details
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the case record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordID`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion article associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a CaseFeed object of `Type ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description The title of the CaseFeed. When the `Type` is `LinkPost`, the `LinkURL` is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of CaseFeed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed.

Field	Details
	• `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for a case record.

SEE ALSO:

Case

EntitySubscription

NewsFeed

FeedItem

UserProfileFeed

CaseHistory

Represents historical information about changes that have been made to the associated Case.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

This object is always read-only.

Fields

Field	Details
`CaseId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Case associated with this record.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the case field that was modified, or a special value to indicate some other modification to the case. The possible values, in addition to the case field names, are: • **ownerAssignment**—The owner of the case was changed. • **ownerAccepted**—A user took ownership of a case from a queue.

Field	Details
	• **ownerEscalated**—The owner of the case was changed due to case escalation. • **external**—A user made the case visible to customers in the Customer Self-Service Portal.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified case field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified case field. Maximum of 255 characters.

Usage

Case history entries are indirectly created each time a case is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field level security on the parent object.

SEE ALSO:

Object Basics

CaseMilestone

Represents a milestone (required step in a customer support process) on a Case. This object is available in API version 18.0 and later.

Supported Calls

`describeCompactLayouts()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable,Sort **Description** ID of the BusinessHours associated with the CaseMilestone.
`CaseId`	**Type** reference **Properties** Filter **Description** ID of the case.
`CompletionDate`	**Type** dateTime **Properties** Filter, Nillable, Update **Description** The date and time the milestone was completed.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable **Description** The time required to complete a milestone in days.
`ElapsedTimeInHrs`	**Type** double **Properties** Filter, Nillable **Description** The time required to complete a milestone in hours.

Field	Details
`ElapsedTimeInMins`	**Type** int **Properties** Filter, Nillable **Description** The time required to complete a milestone in minutes.
`IsCompleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the milestone is completed (`true`) or not (`false`).
`IsViolated`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the milestone is violated (`true`) or not (`false`).
`MilestoneTypeId`	**Type** reference **Properties** Filter, Nillable **Description** The ID of the milestone on the case.
`StartDate`	**Type** dateTime **Properties** Filter, Nillable, Update **Description** The date and time the milestone started on the case.
`TargetDate`	**Type** dateTime **Properties** Filter **Description** The date and time the milestone must be completed.

Field	Details
`TargetResponseInDays`	**Type** double **Properties** Filter, Nillable **Description** The time to complete the milestone in days.
`TargetResponseInHrs`	**Type** double **Properties** Filter, Nillable **Description** The time to complete the milestone in hours.
`TargetResponseInMins`	**Type** int **Properties** Filter, Nillable **Description** The time to complete the milestone in minutes.
`TimeSinceTargetInMins`	**Type** text **Properties** Nillable **Description** The time elapsed since the milestone target. The format is minutes and seconds.
`TimeRemainingInMins`	**Type** text **Properties** Nillable **Description** Time remaining to reach the milestone target. The format is minutes and seconds.

Usage

This object lets you view a milestone on a case. It also lets you view if the milestone was completed and when it must be completed.

SEE ALSO:

Case

MilestoneType

SlaProcess

CaseOwnerSharingRule

Represents the rules for sharing a case with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Cases owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for cases. General sharing and territory management-related sharing use this object.

SEE ALSO:

Case

CaseShare

Metadata API Developer Guide: SharingRules

CaseShare

Represents a sharing entry on a Case.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can’t access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`CaseAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Case. The possible values are: • `Read` • `Edit` • `All` This value is not valid for creating or deleting records.

Field	Details
	This field must be set to an access level that is higher than the organization's default access level for cases.
`CaseId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Case associated with this sharing entry. This field can't be updated.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Case with them. • `Owner`—The User is the owner of the Case. • `ImplicitChild`—User or Group has access to the Case on the Account associated with this Case. • `Rule`—The User or Group has access via a Case sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Case. This field can't be updated.

Usage

This object allows you to determine which users and groups can view and edit Case records owned by other users.

If you attempt to create a new record that matches an existing record, request updates any modified fields and returns the existing record.

SEE ALSO:

AccountShare
LeadShare
OpportunityShare

CaseSolution

Represents the association between a Case and a Solution.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Case associated with the Solution.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`SolutionId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description Required. ID of the Solution associated with the case.

Usage

You can't update this object via the API. If you attempt to create a record that matches an existing record, the request simply returns the existing record.

SEE ALSO:

CaseShare

SolutionStatus

CaseStatus

Represents the status of a Case, such as New, On Hold, or In Process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this case status value represents a closed Case (`true`) or not (`false`). Multiple case status values can represent a closed Case.
`IsDefault`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default case status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this case status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the case status picklist. These numbers are not guaranteed to be sequential, as some previous case status values might have been deleted.

Usage

This object represents a value in the case status picklist. The case status picklist provides additional information about the status of a Case, such as whether a given `Status` value represents an open or closed case. Query the CaseStatus object to retrieve the set of values in the case status picklist, and then use that information while processing Case records to determine more information about a given case. For example, the application could test whether a given case is open or closed based on its `Status` value and the value of the `IsClosed` property in the associated CaseStatus object.

SEE ALSO:

Object Basics

CaseTag

Associates a word or short phrase with a Case

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

CaseTag stores the relationship between its parent TagDefinition and the Case being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

CaseTeamMember

Represents a case team member, who works with a team of other users to help resolve a case.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`MemberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or contact who is a member on a case team.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the case with which the case team member is associated.
`TeamRoleId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the case team role with which the case team member is associated.
`TeamTemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the predefined team with which the case team member is associated.

Field	Details
`TeamTemplateMemberId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the team member included in a predefined case team.

CaseTeamRole

Represents a case team role. Every case team member has a role on a case, such as “Customer Contact” or “Case Manager.”

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group for cases. The possible values are: • `None` • `Read` • `Edit`
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the case team role.
`PreferencesVisibleInCSP`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Indicates whether or not the case team role is visible to Customer Portal users.

CaseTeamTemplate

Represents a predefined case team, which is a group of users that helps resolve a case.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A text description of the predefined case team.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the predefined case team.

CaseTeamTemplateMember

Represents a member on a predefined case team, which is a group of users that helps resolve cases.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`MemberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or contact who is a team member on a predefined case team.
`TeamRoleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the predefined case team member's case team role.
`TeamTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the predefined case team's template.

CaseTeamTemplateRecord

The CaseTeamTemplateRecord object is a linking object between the Case and CaseTeamTemplate objects. To assign a predefined case team to a case (customer inquiry), create a CaseTeamTemplateRecord record and point the `ParentId` to the case and the `TeamTemplateId` to the predefined case team.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the case with which the case team template record is associated.
`TeamTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the predefined case team with which the case team template record is associated.

CategoryData

Represents a logical grouping of Solution records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CategoryNodeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the CategoryNode associated with the solution.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`RelatedSobjectId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the solution related to the category.

Usage

This object allows you to assign one or more categories to a Solution. It is an intermediate data table with two foreign keys that defines the relationship between a CategoryNode and a Solution record.

CategoryData has two foreign keys:

- The first foreign key, `CategoryNodeId`, refers to the ID of a CategoryNode.
- The other foreign key, `RelatedSobjectId`, refers to a Solution ID.

This is a many-to-many relationship, so there can be multiple rows returned with a `CategoryNodeId`. A Solution can be associated with multiple categories.

SEE ALSO:

Object Basics

CategoryNode

Represents a tree of Solution categories.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Customer Portal users can't access this object.

- Attempting to delete a CategoryNode that has children (referred by CategoryNode.Parent), or is referred to elsewhere, causes a failure.

Fields

Field	Details
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the category node.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent of this node, if any.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the sort order of child CategoryNode objects.
`SortStyle`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the sort order is alphabetical or custom.

Usage

A CategoryNode defines a category of solutions. In the user interface, you can edit category definitions from Setup by entering *`Solution Categories`* in the `Quick Find` box, then selecting **Solution Categories**.

SEE ALSO:

CategoryData

Solution

CategoryNodeLocalization

When the Translation Workbench is enabled for your organization, the CategoryNodeLocalization object provides the translation of the label of a solution category.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`CategoryNodeId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the solution CategoryNode that is being translated.
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the `Language` field.
`Language`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages:

Field	Details
	• Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th` The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi` The following platform languages are available for organizations that use Salesforce exclusively as a platform.

Field	Details
	• Albanian: `sq` • Arabic (Algeria): `ar_DZ` • Arabic (Bahrain): `ar_BH` • Arabic (Egypt): `ar_EG` • Arabic (Iraq): `ar_IQ` • Arabic (Jordan): `ar_JO` • Arabic (Kuwait): `ar_KW` • Arabic (Lebanon): `ar_LB` • Arabic (Libya): `ar_LY` • Arabic (Morocco): `ar_MA` • Arabic (Oman): `ar_OM` • Arabic (Qatar): `ar_QA` • Arabic (Saudi Arabia): `ar_SA` • Arabic (Sudan): `ar_SD` • Arabic (Syria): `ar_SY` • Arabic (Tunisia): `ar_TN` • Arabic (United Arab Emirates): `ar_AE` • Arabic (Yemen): `ar_YE` • Armenian: `hy` • Basque: `eu` • Bosnian: `bs` • Bengali: `bn` • Catalan: `ca` • Chinese (Simplified—Singapore): `zh_SG` • Chinese (Traditional—Hong Kong): `zh_HK` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU` • English (Canada): `en_CA` • English (Hong Kong): `en_HK` • English (India): `en_IN` • English (Ireland): `en_IE` • English (Malaysia): `en_MY` • English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • French (Belgium): `fr_BE` • French (Canada): `fr_CA`

Field	Details
	• French (Luxembourg): fr_LU • French (Switzerland): fr_CH • Georgian: ka • German (Austria): de_AT • German (Belgium): de_BE • German (Luxembourg): de_LU • German (Switzerland): de_CH • Hindi: hi • Icelandic: is • Irish: ga • Italian (Switzerland): it_CH • Latvian: lv • Lithuanian: lt • Luxembourgish: lb • Macedonian: mk • Malay: ms • Maltese: mt • Romanian (Moldova): ro_MD • Montenegrin: sh_ME • Romansh: rm • Serbian (Cyrillic): sr • Serbian (Latin): sh • Spanish (Argentina): es_AR • Spanish (Bolivia): es_BO • Spanish (Chile): es_CL • Spanish (Colombia): es_CO • Spanish (Costa Rica): es_CR • Spanish (Dominican Republic): es_DO • Spanish (Ecuador): es_EC • Spanish (El Salvador): es_SV • Spanish (Guatemala): es_GT • Spanish (Honduras): es_HN • Spanish (Nicaragua): es_NI • Spanish (Panama): es_PA • Spanish (Paraguay): es_PY • Spanish (Peru): es_PE • Spanish (Puerto Rico): es_PR • Spanish (United States): es_US

Field	Details
	• Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Tagalog: `tl` • Tamil: `ta` • Urdu: `ur` • Welsh: `cy` The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the solution category. Label is **Translation**.

Usage

Use this object to translate the labels of your solution categories into a supported language. Users with the Translation Workbench enabled can view category node translations, but either the "Customize Application," "Manage Translation," or "Manage Categories" permission is required to create or update category node translations.

SEE ALSO:

ScontrolLocalization

WebLinkLocalization

ChannelProgram

Represents a channel program that vendors use to market and sell their products through channel partners. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Category of the channel program. Categories group channel programs by type. For example, a reseller category would include all the different regional reseller channel programs.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the channel program.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether the channel program is active. New channel programs are inactive by default.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the channel program.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the channel program.

ChannelProgramFeed

Represents a single feed item on a channel program feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.

Field Name	Details
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are: • NetworkId—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope. • Only feed items with a CollaborationGroup or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the channel program.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a RypplePost. This field is typically null for all posts except ContentPost and RypplePost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.

Field Name	Details
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field.

Field Name	Details
	• UserStatus—automatically generated when a user adds a post. Deprecated. The following values appear in the Type picklist for all feed objects but apply only to CaseFeed: • AttachArticleEvent—generated event when a user attaches an article to a case. • CallLogPost—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • CaseCommentPost—generated event when a user adds a case comment for a case object. • ChangeStatusPost—generated event when a user changes the status of a case. • ChatTranscriptPost—generated event when Live Agent transcript is saved to a case. • EmailMessageEvent—generated event when an email related to a case object is sent or received. • FacebookPost—generated when a Facebook post is created from a case. Deprecated. • MilestoneEvent—generated when a case milestone is completed or reaches violation status. • SocialPost—generated when a social post is created from a case. Note: If you set type to ContentPost, also specify ContentData and ContentFileName.
Visibility	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • AllUsers—The feed item is available to all users who have permission to see the feed item. • InternalUsers—The feed item is available to internal users only. Note the following exceptions for Visibility. • For record posts, Visibility is set to InternalUsers for all internal users by default. • External users can set Visibility only to AllUsers. • On user and group posts, only internal users can set Visibility to InternalUsers.

ChannelProgramHistory

Represents the history of changes to the values in the fields of a channel program object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ChannelProgramId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the channel program.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.

ChannelProgramLevel

Represents a level, based on member experience, in a channel program. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the channel program level.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the channel program level.

Field Name	Details
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the user who is the owner of the record.
`ProgramId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the channel program.
`Rank`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An integer associated with the level. For example, 1 represents the lowest level, 2 the next level up, etc.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.

ChannelProgramLevelFeed

Represents a single feed item on a channel program level feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags:

Field Name	Details
	• `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are:

Field Name	Details
	• `NetworkId`—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`. • Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the channel program level.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email

Field Name	Details
	tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event.

Field Name	Details
	• `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

ChannelProgramLevelHistory

Represents the history of changes to the values in the fields of a channel program level object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Fields

Field Name	Details
ChannelProgramLevelId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the channel program level.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.

ChannelProgramLevelShare

Represents a sharing entry on a channel program level record. This object is available in API version 43.0 and later.

Supported Calls

create(), delete(), describeSObjects(), query(), retrieve(), update(), upsert()

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the channel program level record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the channel program level record owner in the role hierarchy.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the channel program level record.

ChannelProgramMember

Represents a partner who is a member of a channel program. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`LevelId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the channel program level.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Name of the channel program member.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the user who is the owner fo the record.
`PartnerId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner.
`ProgramId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the channel program.

ChannelProgramMemberShare

Represents a sharing entry on a channel program member record. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the channel program member record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the channel program member record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description ID of the user or group that has been given access to the channel program member record.

ChannelProgramOwnerSharingRule

Represents a rule for sharing a channel program object with users other than the owner. This object is available in API version 41.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to channel program records. Values are: • `Read Only` • `Read/Write`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the source group. Channel program records that are owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that you are granting access to.

SEE ALSO:

ChannelProgram

ChannelProgramShare

Metadata API Developer Guide: SharingRules

ChannelProgramShare

Represents a sharing entry on a channel program record. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the channel program record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the channel program record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the channel program record.

ChatterActivity

ChatterActivity represents the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments made by the ParentId.
`CommentReceivedCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments received by the ParentId.
`InfluenceRawRank`	**Type** int **Properties** Filter, Group, Sort **Description** Number indicating the ParentId's Chatter influence rank, which is calculated based on the ParentId's ChatterActivity statistics, relative to the other users in the organization. This field is available in API version 26.0 and later.
`LikeReceivedCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes received by the ParentId.

Field Name	Details
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Identifier of the community to which the ChatterActivity belongs. This field is available only if Salesforce Communities is enabled in your organization. This field is available in API version 26.0 and later.
ParentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Identifier of the object type to which the ChatterActivity is related. In API version 43.0, the `ParentId` must be a `UserId` or SelfServiceUser ID.
PostCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedItems made by the ParentId.

Usage

- Use this object to reference the Chatter activity statistics, which include the number of posts and comments made by a user and the number of comments and likes on posts and comments received by the same user.
- You can directly query for ChatterActivity.

```
SELECT Id, PostCount, LikeReceivedCount
FROM ChatterActivity
WHERE ParentId = UserId
```

  Note: To query ChatterActivity, you must provide the `ParentId`. In API version 43.0, the `ParentId` must be a `UserId` or SelfServiceUser ID.

- A ChatterActivity record is created for users the first time they post or comment. Users who have never posted or commented don't have ChatterActivity records. If users make only one post and then delete it, they do have ChatterActivity records. In both cases, the user interface displays zeros for their Chatter activity.

- Use the `InfluenceRawRank` field to reference a user's Chatter influence rank. This field is available in API version 26.0 and later.

SEE ALSO:

FeedItem
FeedComment
FeedLike

ChatterAnswersActivity

Represents the reputation of a User in Chatter Answers communities. This object is available in API version 25.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
BestAnswerReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of best answers the User has received from other users.
BestAnswerSelectedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of best answers the User has selected.
QuestionsCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of Question records posted by the User.
QuestionSubscrCount	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of Question records the User has selected to follow.
QuestionSubscrReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of users following Question records posted by the User.
QuestionUpVotesCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has marked on Question records posted by other users.
QuestionUpVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has received from other users on the Question records he or she has posted.
RepliesCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of Reply records posted by the User.
ReplyDownVotesCount	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of down votes the User has marked on Reply records posted by other users.
ReplyDownVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes the User has received from other users on the Reply records he or she has posted.
ReplyUpVotesCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has marked on the Reply records posted by other users.
ReplyUpVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes the User has received from other users on the Reply records he or she has posted.
ReportAbuseOnQuestionsCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of abuses that the User has reported on Question records posted by other users.
ReportAbuseOnRepliesCount	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of abuses that the User has reported on Reply records posted by other users.
ReportAbuseReceivedOnQnCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of abuses reported by other users on the Question records posted by the User.
ReportAbuseReceivedOnReCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** the number of abuses reported by other users on the Reply records posted by the User.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The User ID associated with this reputation.
CommunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID for the zone associated with this reputation.

Usage

Use this object to view metrics on User activity in Chatter Answers. For example, you can use the ChatterAnswersActivity object to view the number of Question records a user is following in Chatter Answers communities.

SEE ALSO:

Question

Reply

User

ChatterAnswersReputationLevel

Represents a reputation level within a Chatter Answers zone. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`CommunityID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the zone for which you're creating the reputation level.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the reputation level.
`Value`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Minimum number of points for this level.

Usage

Use to create or edit reputation levels for the zone.

ChatterConversation

Represents a private conversation in Chatter, consisting of messages that conversation members have sent or received. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the conversation.

Usage

Use this object to identify private conversations in Chatter. Users can access this object if they have the “Manage Chatter Messages and Direct Messages” permission. This object is read-only via the API and is provided only to allow administrators to view users' Chatter messages; for example, for compliance purposes.

SEE ALSO:

ChatterConversationMember

ChatterMessage

ChatterConversationMember

Represents a member of a private conversation in Chatter. A member has either sent messages to or received messages from other conversation participants. This object is available in API version 23.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ConversationId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the associated ChatterConversation.
`MemberId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the conversation member.

Usage

Use this object to view members of private conversations in Chatter. Users can access this object if they have the "Manage Chatter Messages and Direct Messages" permission. This object is read-only via the API and is provided only to allow administrators to view users' Chatter messages; for example, for compliance purposes.

SEE ALSO:

ChatterConversation

ChatterMessage

ChatterMessage

Represents a message sent as part of a private conversation in Chatter. This object is available in API version 23.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Body`	**Type** textarea

Field Name	Details
	Properties Update **Description** Text of the message.
ConversationId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the conversation that the ChatterMessage is associated with.
SenderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the sender.
SenderNetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the community from which the message was sent. This field is available only if Salesforce Communities is enabled in your organization. This field is available in API version 32.0 and later.
SentDate	**Type** dateTime **Properties** Filter, Sort **Description** Date the message was sent.

Usage

Use this object to view and delete messages sent or received via private conversations in Chatter. Users can access this object if they have the “Manage Chatter Messages and Direct Messages” permission. Users with the “Moderate Communities Chatter Messages” permission can access this object in communities they’re a member of, only if the message has been flagged as inappropriate. This object is provided to allow administrators to view and delete users' Chatter messages, for example, for compliance purposes.

Messages are hard deleted. They aren't sent to the recycle bin.

Deleting a message that resulted from sharing a file with someone does not delete the file itself.

SEE ALSO:

- ChatterConversation
- ChatterConversationMember

ClientBrowser

Represents a cookie added to the browser upon login, and also includes information about the browser application where the cookie was inserted. This object is available in version 28.0 and later.

Supported Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`

Fields

Field	Details
`FullUserAgent`	**Type** string **Properties** Filter, Nillable, Sort **Description** Detailed information about the client (browser). For example, `Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.1) Gecko/2008070208 Firefox/3.0.1`
`LastUpdate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the last time the cookie was changed.
`ProxyInfo`	**Type** string **Properties** Filter, Nillable, Sort **Description** The browser's current proxy information.

Field	Details
`UsersId`	**Type** reference **Properties** Nillable, Group, Sort **Description** The ID of the user associated with this item.

Usage

At every login, the device the login request is from is checked against the known devices using ClientBrowser. A match means a cookie was found on the browser that matches an entry in the ClientBrowser table, so the device is known. No match means that no matching cookie was found, so the device is unknown, and the user is asked to confirm their identity.

CollaborationGroup

Represents a Chatter group. This object is available in API version 19.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

The visibility of information in groups depends on the type of group and the user's permissions.

- **Members**: Any user with the "Create and Own New Chatter Groups" permission can create public, private, and unlisted groups, including in any communities they belong to.
- **Owners and managers**: Users can modify group details for any group they own or manage. Owners can also delete groups they own.
- **Nonmembers**: These user permissions allow group access regardless of group membership.
  - "View All Data"—Allows users to view all public and private groups across their organization and its communities. Users with this permission can't view unlisted group information, unless they have the "Modify Unlisted Groups" permission as well.
  - "Modify All Data"—Allows users to view, modify, and delete all public and private groups across their organization and its communities. Users with this permission can't view or modify unlisted group information, unless they have the "Manage Unlisted Groups" permission as well.
  - "Create and Customize Communities"—Allows users to view, modify, and delete all public and private groups in communities.
  - "Manage Unlisted Groups"—Allows users to search for, access, and modify any unlisted group in an organization and its communities.
  - "Data Export"—Allows users to export any data from Salesforce, including private and unlisted group data from an organization and its communities.

- **Apex and Visualforce**: Apex code runs in system mode, which means that the permissions of the current user aren't taken into account.
  - Visualforce pages that display groups might expose unlisted or private group data to users who aren't members.
  - Because system mode disregards the user's permissions, all users who are accessing a Visualforce page that's showing a group can act as an owner of that group.
  - AppExchange apps that are written in Apex and that access all groups will expose unlisted groups to users who aren't members.

To limit and manage access to the unlisted and private groups in your organization:

- Explicitly filter out unlisted and private group information from SOQL queries in all Apex code.
- Use permission sets, profile-level permissions, and sharing checks in your code to further limit group access.
- Use Apex triggers on the CollaborationGroup object to monitor and manage the creation of groups. In Setup, enter *`Group Triggers`* in the `Quick Find` box, then select **Group Triggers** to add triggers.

Fields

Field	Details
`AnnouncementId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the ID of the Announcement last associated with the group. This field is available in API version 30.0 and later.
`BannerPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the group's banner photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo. This field is available in API version 36.0 and later.
`CanHaveGuests`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If set to `true`, indicates that a group allows customers. Chatter customers are people outside your company's email domains who can only see groups they're invited to and interact with members of those groups; they can't see any Salesforce information.

Field	Details
	This field is available starting in API version 23.0, but groups that allow customers are accessible from earlier API versions. However, when accessed from earlier API versions, groups that allow customers aren't distinguishable from private groups. We strongly recommend that you upgrade to the latest API version. If you must use an earlier version, name groups that allow customers to indicate that they include customers.
`CollaborationType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of Chatter group. Available values are: • `Public`—Anyone can see and post updates. Anyone can join a public group. • `Private`—Only members can see the group feed and post updates. Non-members can only see the group name and a few other details in list views, search, and on the group page. The group's owner or managers must add members who request to join the group. • `Unlisted`—Only members and users with the “Manage Unlisted Groups” permission can see the group and post updates. Other users can’t access the group or see it in lists, search, and feeds.
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the group.
`FullPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the group's profile photo. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.
`GroupEmail`	**Type** email

Field	Details
	Properties Group, Nillable, Sort **Description** The email address for posting to the group. For private groups, only visible to members and users with “Modify All Data” or “View All Data” permissions. This field is available in API version 29.0 and later.
`HasPrivateFieldsAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If set to `true`, indicates that a user can see the `InformationBody` and `InformationTitle` fields in a private group. This field is set to `true` for members of a private group and users with “Modify All Data” or “View All Data” permissions.
`InformationBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** The text of the Information section. For private groups, only visible to members and users with “Modify All Data” or “View All Data” permissions.
`InformationTitle`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title of the Information section. For private groups, only visible to members and users with “Modify All Data” or “View All Data” permissions.
`IsArchived`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the group is archived (`true`) or not (`false`).
`IsAutoArchiveDisabled`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether automatic archiving is disabled for the group (`true`) or not (`false`).
`IsBroadcast`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the group is a broadcast group (`true`) or not (`false`). This field is available in API version 36.0 and later.
`LastFeedModifiedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date of the last post or comment on the group.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`MediumPhotoUrl`	**Type** url **Properties** Filter Nillable Sort

Field	Details
	Description The URL for the larger, cropped photo size.
MemberCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of members in the group.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the group. Group names must be unique across public and private groups. Unlisted groups don't require unique names.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the community that this group is part of. This field is available only if Salesforce Communities is enabled in your organization. You can only add a `NetworkId` when creating a group. You can't change or add a `NetworkId` for an existing group. This field is available in API version 26.0 and later.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the group. Only the current group owner or people with the "Modify All Data" permission can update the `OwnerId`.
SmallPhotoUrl	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for a thumbnail of the group's profile photo.

Field	Details
	The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.

Usage

Use this object to create, edit, or delete groups in an organization or in a community. Deleting a group permanently deletes all posts and comments to the group. It also deletes all files and links posted to the group and removes the files from other locations where they were shared.

As a Chatter group member, you can post to the group using the CollaborationGroupFeed object. As a Chatter group owner or manager, you can add or remove group members using the CollaborationGroupMember object, post announcements to the group using the Announcement object, and accept or decline requests to join private groups using the CollaborationGroupMemberRequest object. Additionally, the group owner, manager, or your Salesforce system administrator can invite people to join the group using the CollaborationInvitation object.

The Salesforce system administrator doesn't need to be a member of the group in order to send invitations using the API.

SEE ALSO:

CollaborationGroupFeed

CollaborationGroupMember

CollaborationGroupMemberRequest

CollaborationGroupFeed

Represents a single feed item on a Chatter group feed. A group feed shows posts and comments about the group. This object is available in API version 19.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

- "Manage Unlisted Groups"

  Only users with this permission can delete items in unlisted groups.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of CollaborationGroupFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable

Field	Details
	Description Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDate DESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>`

Field	Details
	Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` **Note:** In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url

Field	Details
	Properties Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the group that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.

Field	Details
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question.

Field	Details
	• `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`.

Field	Details
	• On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a group.

SEE ALSO:

CollaborationGroup
CollaborationGroupMember
NewsFeed

CollaborationGroupMember

Represents a member of a Chatter group. This object is available in API version 19.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`CollaborationGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated CollaborationGroup.
`CollaborationRole`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The role of a group member. Group owners and managers can change roles for members of their groups. The valid values are: • `Standard`—Indicates that a user is a group member. Members can post and comment in the group.

Field	Details
	• `Admin`—Indicates that a user is a group manager. Managers can post and comment, change member roles, edit group settings, add and remove members, delete posts and comments, and edit the group information field. Note: To change the group owner, use the `OwnerId` field on the CollaborationGroup object.
`LastFeedAccessDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when a group member last accessed the group's feed. The value is only updated when a member explicitly consumes the group's feed, not when the member sees group posts in other feeds, like the profile feed.
`MemberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the group member.
`NotificationFrequency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Required. The frequency at which Salesforce sends Chatter group email digests to this member. Can only be set by the member or users with the "Modify All Data" permission. The valid values are: • `D`—Daily • `W`—Weekly • `N`—Never • `P`—On every post The default value is specified by the member in their Chatter email settings. In communities, the `Email on every post` option is disabled once more than 10,000 members choose this setting for the group. All members who had this option selected are automatically switched to `Daily digests`.

Usage

Use this object to view, create, and delete Chatter group members. You must be a group owner or manager to create members for private Chatter groups.

SEE ALSO:

CollaborationGroup

CollaborationGroupFeed

CollaborationGroupMemberRequest

CollaborationGroupMemberRequest

Represents a request to join a private Chatter group. This object is available in API version 21.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CollaborationGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the private Chatter group.
`RequesterId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user requesting to join the group; must be the ID of the context user.
`ResponseMessage`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Optional message to be included in the notification email when `Status` is `Declined`.

Field	Details
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The status of the request. Available values are: • Accepted • Declined • Pending

Usage

This object represents a request to join a private Chatter group, and can be used to accept or decline requests to join private groups you own or manage. On create, an email is sent to the owner and managers of the private group to be accepted or declined. When the Status is Accepted or Declined, an email is sent to notify the requester. When the Status is Declined, a ResponseMessage is optionally included to provide additional details.

Note the following when working with requests:

- Users with the “Modify All Data” or “View All Data” permission can view records for all groups, regardless of membership.
- A user can be a member of 300 groups. Requests to join groups count against this limit.
- Status can't be specified on create.
- You can only update a request when the Status is Pending.
- You can't delete or update a request with a Status of Accepted or Declined.

SEE ALSO:

CollaborationGroup

CollaborationGroupMember

CollaborationGroupRecord

Represents the records associated with Chatter groups.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), query(), retrieve(), update(), upsert(), undelete()

Fields

Field	Details
`CollaborationGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Chatter group.
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Optional. The ID of the community that the group belongs to. Available from API version 34.0.
`RecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. The ID of the record associated with the Chatter group.

CollaborationInvitation

Represents an invitation to join Chatter, either directly or through a group. This object is available in API version 21.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Invitations are available if “Allow Invitations” is enabled for your organization.

Invitations are limited to your allowed domain(s) unless the invite is sent from a private group that allows customers. Allowed domains are set by the administrator.

Invitations to customers are available if “Allow Customer Invitations” is enabled for your organization. Users must have the “Invite Customers to Chatter” permission to send invitations to people outside their Chatter domain.

Fields

Field	Details
`InvitedUserEmail`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The email address for the user invited to join Chatter. Label is `Invited Email`.
`InvitedUserEmailNormalized`	**Type** email **Properties** Filter, Group, Sort **Description** A normalized version of the `InvitedUserEmail` entered. Label is `Invited Email (Normalized)`.
`InviterId`	**Type** reference **Properties** Filter, Group, Sort **Description** The person that initiated the invitation.
`OptionalMessage`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** An optional message from the person sending the invitation to the person receiving it.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Used when the email address on the invitation is different than the one entered when the invitee accepts the invitation.
`SharedEntityId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** ID of the user or group associated with this invitation. • If the invitation is to join Chatter, the `SharedEntityId` is the ID of the User that created the invitation. The invitee will auto-follow the inviter. • If the invitation is to join a group within Chatter, the `SharedEntityId` is the ID of the Chatter CollaborationGroup. • To invite a customer, set `SharedEntityId` to the ID of the private CollaborationGroup with Allow Customers turned on.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the invitation. Possible values are: • `Sent` • `Accepted` • `Canceled`

Usage

Use this object to create or delete (cancel) invitations to join Chatter. You can either invite a user to join Chatter directly or as part of a CollaborationGroup.

Note: To invite someone to join a CollaborationGroup, you must be either the owner or a manager of the group or a Salesforce system administrator.

The Salesforce system administrator doesn't need to be a member of the group in order to send invitations using the API.

When the person accepts your CollaborationGroup invitation, they join the CollaborationGroup and Chatter as well.

Note: You can't send invitations to users of the organization the invite was sent from.

Invited users can view profiles, post on their feed, and join groups, but can't see your Salesforce data or records.

If your organization allows groups with customers, owners and managers of private groups with the "Allow Customers" setting, as well as system administrators, can use this object to invite customers.

Java Samples

The following example shows how to send an invitation to join Chatter:

```
public void invitePeople(String inviterUserId, String invitedEmail) throws Exception {
    CollaborationInvitation invitation = new CollaborationInvitation();
```

```
    invitation.setSharedEntityId(inviterUserId);//pass the userId of the inviter
    invitation.setInvitedUserEmail(invitedEmail);//email of the invited user
    insert(invitation);
}
```

The following example shows how to send an invitation to a customer user from a group that allows customers:

```
public void inviteToGroup(String GroupName, String invitedEmail) throws Exception {
    QueryResult qr = query("select id from collaborationgroup where name = '" +
        GroupName); //pass the group name
    String groupId = qr.getRecords()[0].getId();
    CollaborationInvitation invitation = new CollaborationInvitation();
    invitation.setSharedEntityId(groupId);//pass the groupId
    invitation.setInvitedUserEmail(invitedEmail);//email of the invited user
    insert(invitation);
}
```

Apex Samples

```
String emailAddress = 'bob@external.com';
CollaborationGroup chatterGroup = [SELECT Id
      FROM CollaborationGroup
      WHERE Name='All acme.com'
      LIMIT 1];
CollaborationInvitation inv = New CollaborationInvitation();
inv.SharedEntityId = chatterGroup.id;
inv.InvitedUserEmail = emailAddress;

try {
   Insert inv;
} catch(DMLException e){
   System.debug('There was an error with the invite: '+e);
}
```

ColorDefinition

Represents the color-related metadata for a custom tab. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
Color	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The color described in web color RGB format—for example, “00FF00”.
`Context`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The color context, which determines whether the color is the main color (or primary) for the tab.
`DurableId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the color.
`TabDefinitionId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The `TabDefinition` ID.
`Theme`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The icon’s theme.

CombinedAttachment

This read-only object contains all notes, attachments, Google Docs, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter that are associated with a record.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.
`ExternalDataSourceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
`ExternalDataSourceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 35.0 and later.

Field Name	Details
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent object.
RecordType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The parent object type.
SharingOption	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.

Field Name	Details
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title of the attached file.

Usage

Use this object to list all notes, attachments, documents uploaded to libraries in Salesforce CRM Content, and files added to Chatter for a record, such as a related list on a detail page.

To determine if an object supports the CombinedAttachment object, call `describeSObject()` on the object. For example, `describeSObject('Account')` returns all the child relationships of the Account object, including `CombinedAttachment`. You can then query the CombinedAttachment child relationship.

```
SELECT Name, (SELECT Title FROM CombinedAttachments)
FROM Account
```

You can't directly query CombinedAttachment.

Community (Zone)

Represents a zone that contains Idea or Question objects.

Note: Starting with the Summer '13 release, Chatter Answers and Ideas "communities" have been renamed to "zones." In API version 28, the API object label has changed to `Zone`, but the API type is still `Community`.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CanCreateCase`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether users can ask private questions in the zone using Chatter Answers.

Field	Details
DataCategoryName	**Type** string **Properties** Filter, Nillable, Group, Sort **Description** The data category associated with the zone.
Description	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Text description of the zone.
HasChatterService	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether Chatter Answers is available in the zone.
IsActive	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the zone is active or inactive. An idea or question can only be posted to an active zone.
IsPublished	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the zone is available in portals.
Name	**Type** string **Properties** Filter, Group, Sort

Field	Details
	Description The name of the zone.
NetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Chatter community that this zone is associated with. This field is available only if Salesforce Communities is enabled in your org. This field is available in API version 43.0 and later.

Usage

Use this object to create a zone in Ideas, Chatter Answers, or Answers. Zones help organize ideas and questions into logical groups and are shared by the Ideas, Answers, and Chatter Answers.

ConnectedApplication

Represents a connected app and its details; all fields are read-only.

Connected apps link client applications, third-party services, other Salesforce organizations, apps and resources to your organization. The connected app configuration specifies authorization and security settings for these resources. This object exposes the settings for a specified connected app.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
MobileSessionTimeout	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Length of time after which the system logs out inactive mobile users.
MobileStartUrl	**Type** url

Field Name	Details
	Properties Filter, idLookup, Nillable, Sort **Description** Users are directed to this URL after they've authenticated when the app is accessed from a mobile device.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name for this object.
`OptionsAllowAdminApprovedUsersOnly`	**Type** boolean **Properties** Filter **Description** Indicates whether access is limited to users granted approval to use the connected app by an administrator. Manage profiles for the app by editing each profile's Access list.
`OptionsHasSessionLevelPolicy`	**Type** boolean **Properties** Filter **Description** Specifies whether the connected app requires a High Assurance level session.
`OptionsRefreshTokenValidityMetric`	**Type** boolean **Properties** Filter **Description** Specifies whether the refresh token validity is based on duration or inactivity. If `true`, the token validity is measured based on the last use of the token; otherwise, it is based on the token duration.
`PinLength`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** For mobile apps, this is the PIN length requirement for users of the connected app.Valid values are `5`, `6`, `7`, `8` or `9`.
`RefreshTokenValidityPeriod`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The duration of an authorization token until it expires in hours, months or days as set in the connected app management page.
`StartUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** If the app is not accessed from a mobile device, users are directed to this URL after they've authenticated.

Contact

Represents a contact, which is a person associated with an account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can access only portal-enabled contacts.

Fields

Field	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account that's the parent of this contact. We recommend that you update up to 50 contacts simultaneously when changing the accounts on contacts enabled for a Customer Portal or partner portal. We also recommend that you make this update after business hours.
AssistantName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The assistant's name.
AssistantPhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The assistant's telephone number.

Birthdate	**Type**
	date
	Properties
	Create, Filter, Group, Nillable, Sort, Update
	Description
	The contact's birthdate.
	Filter criteria for report filters, list view filters, and SOQL queries ignore the year portion of the `Birthdate` field. For example, these SOQL query returns contacts with birthdays later in the year than today:
	`SELECT Name, Birthdate`
	`FROM Contact`
	`WHERE Birthdate > TODAY`

CanAllowPortalSelfReg	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Update **Description** Indicates whether this contact can self-register for your Customer Portal (`true`) or not (`false`).
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record's clean status as compared with Data.com. Values include: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`. Several values for `CleanStatus` appear with different labels on the contact record. • `Matched` appears as `In Sync` • `Acknowledged` appears as `Reviewed` • `Pending` appears as `Not Compared`
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`Department`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The contact's department.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of the contact. Label is **Contact Description** up to 32 KB.
DoNotCall	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates that the contact does not want to receive calls.
Email	**Type** email **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The contact's email address.
EmailBouncedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the contact bounces, the date and time of the bounce.
EmailBouncedReason	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the contact bounces, the reason for the bounce.
Fax	**Type** phone

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The contact’s fax number. Label is **Business Fax**.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact’s first name up to 40 characters.
`HasOptedOutOfEmail`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the contact prohibits receiving email from Salesforce (`true`) or not (`false`). Label is **Email Opt Out**.
`HasOptedOutOfFax`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the contact prohibits receiving faxes.
`HomePhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact’s home telephone number.
`IndividualId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this contact. This field is available if Data Protection and Privacy is enabled.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsEmailBounced`	**Type** boolean **Properties** Filter, Group, Sort **Description** If bounce management is activated and an email is sent to a contact, indicates whether the email bounced (`true`) or not (`false`).
`IsPersonAccount`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Read only. Indicates whether this account has a record type of Person Account (`true`) or not (`false`). Label is **Is Person Account**.
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the company's ID in Data.com. If an account has a value in this field, it means that the account was imported from Data.com. If the field value is `null`, the account was not imported from Data.com. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. Important: The `Jigsaw` field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify this value.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is the most recent of either:

Field	Details
	• Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Last name of the contact up to 80 characters.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LeadSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's source.
`MailingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the mailing address. Read-only. For details on compound address fields, see Address Compound Fields.
• `MailingCity` • `MailingState`	**Type** string

Field	Details
• MailingCountry • MailingPostalCode	**Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Mailing address details.
• MailingStateCode • MailingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the mailing address's state and country.
MailingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for mailing address.
MailingGeocodeAccuracy	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the mailing address. For details on geolocation compound field, see Compound Field Considerations and Limitations.
MailingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `MailingLongitude` to specify the precise geolocation of a mailing address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
MailingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `MailingLatitude` to specify the precise geolocation of a mailing address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`MasterRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this record was deleted as the result of a merge, this field contains the ID of the record that remains. If this record was deleted for any other reason, or has not been deleted, the value is `null`.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact's middle name up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`MobilePhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contact's mobile phone number.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName`, `MiddleName`, `LastName`, and `Suffix` up to 121 characters.
`OtherAddress`	**Type** address **Properties** Filter, Nillable

Field	Details
	Description The compound form of the other address. Read-only. For details on compound address fields, see Address Compound Fields.
• `OtherCity` • `OtherCountry` • `OtherPostalCode` • `OtherState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Alternate address details.
• `OtherCountryCode` • `OtherStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO codes for the alternate address's state and country.
`OtherGeocodeAccuracy`	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the other address. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`OtherLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `OtherLongitude` to specify the precise geolocation of an alternate address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`OtherLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `OtherLatitude` to specify the precise geolocation of an alternate address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`OtherPhone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Telephone for alternate address.
`OtherStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street for alternate address.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this contact.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Telephone number for the contact. Label is **Business Phone**.
`PhotoUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Path to be combined with the URL of a Salesforce instance (*Example:* https://*yourInstance*.salesforce.com/) to generate a URL to request the social network profile image associated with the contact. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the contact.

Field	Details
	Empty if Social Accounts and Contacts isn't enabled or if Social Accounts and Contacts is disabled for the requesting user.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`ReportsToId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field doesn't appear if `IsPersonAccount` is `true`.
`Salutation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Honorific abbreviation, word, or phrase to be used in front of name in greetings, such as Dr. or Mrs.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name suffix of the contact up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title of the contact, such as CEO or Vice President.

Note: If you are importing contact data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use this object to manage individual people who are associated with an account. You can create, query, delete, or update any attachment associated with a contact.

Create or update contacts by converting a lead with the `convertLead()` call.

SEE ALSO:

Object Basics

ContactHistory

ContactCleanInfo

Stores the metadata Data.com Clean uses to determine a contact record's clean status. Helps you automate the cleaning or related processing of contact records. ContactCleanInfo includes a number of bit vector fields.

Contact Clean Info provides a snapshot of the data in your Salesforce contact record and its matched Data.com record at the time the Salesforce record was cleaned.

Contact Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentEmail` field. If the `IsDifferentEmail` field's value is `False`, that means the `Email` field value is *the same* on the Salesforce contact record and its matched Data.com record.

ContactCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the contact record.
- `IsDifferent` indicates whether or not a field on the contact record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the contact record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the contact record is in a `Reviewed` state, which means that the value was reviewed but not accepted.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.

Field Name	Details
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`CleanedByJob`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact record was cleaned by a Data.com Clean job (`true`) or not (`false`).
`CleanedByUser`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact record was cleaned by a Salesforce user (`true`) or not (`false`).
`ContactId`	**Type** reference **Properties** Filter, Group, Sort **Description** The unique, system-generated ID assigned when the contact record was created.
`ContactStatusDataDotCom`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the contact per Data.com. Values are: `Contact is Active per Data.com`, `Phone is Wrong per Data.com` , `Email is Wrong per Data.com`, `Phone and Email are Wrong per Data.com`, `Contact Not at Company per Data.com`, `Contact is Inactive per Data.com`, `Company this contact belongs to is out of business per Data.com`, `Company`

Field Name	Details
	`this contact belongs to never existed per Data.com` or `Email address is invalid per Data.com`.
`Country`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`DataDotComID`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the contact.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address for the contact.
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The contact's first name.
`IsDifferentCity`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountry`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the contact's `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountryCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentEmail`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Email` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentFirstName`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `First Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentLastName`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Last Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the contact's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Postal Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the contact's `Street` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTitle`	**Type** boolean **Properties** Filter

Field Name	Details
	Description Indicates whether the contact's `Title` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Email` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTitle`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the contact's `Title` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contact has been reported to Data.com as *`Inactive`* (`true`) or not (`false`).
`IsReviewedAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Address` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Email` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Name` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedPhone`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the contact's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the contact's `Title` field value is in a `Reviewed` state (`true`) or not (`false`).
`LastMatchedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date the contact record was last matched and linked to a Data.com record.
`LastName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The contact's last name.
`LastStatusChangedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
`LastStatusChangedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.

Field Name	Details
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.
Name	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Contact Clean Info Name**. The name of the contact. Maximum size is 255 characters.
Phone	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number for the contact.
PostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
State	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`Street`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the contact.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The contact's title.

Usage

Developers can create triggers that read the Contact Clean Info fields to help automate the cleaning or related processing of contact records.

Create a customized set of `Title` field values. Use triggers to map values from fields on imported or cleaned records onto a standard set of values.

ContactFeed

Represents a single feed item in the feed on a contact record detail page. This object is available in API version 18.0 and later.

A contact feed shows recent changes to a contact record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to Contact records.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"

- "Modify All" on the Contact object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of ContactFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.

Field	Details
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.

Field	Details
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text.

Field	Details
	Rich text supports the following HTML tags: • <p> Tip: Though the tag isn't supported, you can use <p> </p> to create lines. • <b> • <code> • <i> • <u> • <s> • • • • <img> The <img> tag is accessible only via the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img> Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, LastModifiedDate is the same as CreatedDate. If a FeedComment is inserted on that feed item, then LastModifiedDate becomes the CreatedDate for that FeedComment. Deleting the FeedComment does not change the LastModifiedDate. Ordering by LastModifiedDate DESC sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.

Field	Details
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. NetworkScope can have the following values: • NetworkId—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the contact record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.

Field	Details
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a contact record.

SEE ALSO:

Contact

EntitySubscription

NewsFeed

UserProfileFeed

ContactHistory

Represents the history of changes to the values in the fields of a contact. This object is available in versions 11.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`ContactId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Contact. Label is **Contact ID**.

Field	Details
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to a contact.

This object respects field level security on the parent object.

SEE ALSO:

Contact

ContactOwnerSharingRule

Represents the rules for sharing a contact with a User other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactAccessLevel`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, UserRole, or User for Contacts. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A Contact owned by a User in the source Group triggers the rule to give access.

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

Usage

Use this object to manage the sharing rules for contacts.

SEE ALSO:

Contact

ContactShare

Metadata API Developer Guide: SharingRules

ContactShare

Represents a list of access levels to a Contact along with an explanation of the access level. For example, if you have access to a record because you own it, the `ContactAccessLevel` is `All` and `RowCause` is Owner.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
ContactId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Contact associated with this sharing entry. This field can't be updated.
ContactAccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to cases associated with the account Contact. The possible values are: • Read • Edit • All This value is not valid for create or update. This field must be set to an access level that is higher than the organization's default access level for contacts.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (true) or not (false). Label is **Deleted**.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to Manual (default). There are many possible values, including: • Rule—The User or Group has access via a Contact sharing rule. • ImplicitChild—The User or Group has access to the Contact via sharing access on the associated Account.

Field	Details
	• `Manual`—The User or Group has access because a User with "All" access manually shared the Contact with them. • `Owner`—The User is the owner of the Contact.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Contact. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Contact records owned by other users.

SEE ALSO:

AccountShare

ContactTag

Associates a word or short phrase with a Contact.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter

Field Name	Details
	Description Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ContactTag stores the relationship between its parent TagDefinition and the Contact being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

ContentAsset

Represents a Salesforce file that has been converted to an asset file in a custom app in Lightning Experience. Use asset files for org setup and configuration. Asset files can be packaged and referenced by other components. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Only admin users can edit or delete ContentAssets.
- Users with file access can create and query ContentAssets.
- It isn't necessary to create asset files for regular, collaborative use of Salesforce Files. "Assetize" files only when they're used in setup and configuration situations.
- Neither the file (ContentDocument) nor the asset settings record (ContentAssets) can be deleted if the asset file is referenced by another component.
- ContentAsset doesn't support search or most recently used (MRU) lists.
- ContentAsset doesn't support Apex triggers.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the document.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the asset file in the API. ContentAsset.DeveloperName: • must be 40 characters or fewer • must begin with a letter • can contain only underscores and alphanumeric characters • can't include spaces • can't end with an underscore • can't contain 2 consecutive underscores In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`isVisibleByExternalUsers`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether unauthenticated users can see the asset file.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language for this document. This field defaults to the user's language unless the org is multi-language enabled. Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for the asset file. This internal label doesn't get translated.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.

ContentBody

Represents the body of a file in Salesforce CRM Content or Salesforce Files. This object is available in API version 40.0 and later.

Supported Calls

`describeSObjects()`

Special Access Rules

Cannot be queried, inserted, updated, or deleted directly.

Fields

Field	Details
`Id`	**Type** ID **Properties** , Filter, Group, idLookup, Sort **Description** ID of the file body.

Usage

ContentBody is intended for internal Salesforce use. If you need to access the file content body, please use ContentVersion.

ContentDistribution

Represents information about sharing a document externally. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Content deliveries must be enabled to query content deliveries.
- Users (including users with the "View All Data" permission) can query only the files that they have access to. If the file is managed by a Content Library, the user must have "Deliver Content" enabled in the library permission definition and be a member of the library. If the file isn't managed by a Content Library, the user must have the "Enable Creation of Content Deliveries for Salesforce Files" permission.
- Users can query the `DistributionPublicUrl` and `Password` fields only if they are the file owner, if the file is shared with them, or if the `RelatedRecordId` specifies a record that the users can access.
- If the shared document is deleted, the delete cascades to any associated ContentDistribution. The ContentDistribution is still queryable by using the `QueryAll` verb.
- If the shared document is archived, the only fields that users can edit are `ExpiryDate` and `PreferencesExpires`.
- Customer Portal users can't access this object.
- Chatter Free users can't access this object.

Fields

Field Name	Details
ContentDocumentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the shared document.
ContentDownloadUrl	**Type** string **Properties** , SortNillable **Description** The link for downloading the file. This field is available in API version 40.0 and later.
ContentVersionId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the shared document version.
DistributionPublicUrl	**Type** string **Properties** Nillable, Sort **Description** URL of the link to the shared document.
ExpiryDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date when the shared document becomes inaccessible.
FirstViewDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description Date when the shared document is first viewed.
LastViewDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the shared document was last viewed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the content delivery.
OwnerId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the user who owns the shared document.
PdfDownloadUrl	**Type** string **Properties** , SortNillable **Description** The link for downloading the file as a PDF. This field is available in API version 40.0 and later.
Password	**Type** string **Properties** Group, Nillable, Sort **Description** A password that allows access to a shared document.
PreferencesAllowOriginalDownload	**Type** boolean

Field Name	Details
	Properties Create, Filter, Update **Description** When `true`, the shared document can be downloaded as the file type that it was uploaded as. When `false`, download availability depends on whether a preview of the file exists. If a preview exists, the file can't be downloaded. If a preview doesn't exist, the file can still be downloaded. If the shared document is a link, it can't be downloaded.
`PreferencesAllowPDFDownload`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the shared document can be downloaded as a PDF if the original file type is PDF or if a PDF preview has been generated.
`PreferencesAllowViewInBrowser`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a preview of the shared document can be viewed in a Web browser.
`PreferencesExpires`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, access to the shared document expires on the date that's specified by `ExpiryDate`.
`PreferencesLinkLatestVersion`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, users see the most recent version of a shared document. When `false`, users see the version of the document that's shared, even if it isn't the most recent version.

Field Name	Details
PreferencesNotifyOnVisit	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the owner of the shared document is emailed the first time that someone views or downloads the shared document.
PreferencesNotifyRndtnComplete	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the owner of the shared document is emailed when renditions of the shared document that can be previewed in a Web browser are generated.
PreferencesPasswordRequired	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a password, specified by `Password`, is required to access the shared document.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record, such as an Account, Campaign, or Case, that the shared document is related to.
ViewCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times that the shared document has been viewed.

Usage

Use this object to create, update, delete, or query information about a document shared externally via a link or via Salesforce CRM Content delivery.

The ContentDistribution object supports triggers before and after these operations: insert, update, delete. It supports triggers after undelete.

Example: The VP of Marketing wants file authors to specify whether their files can be shared with external people using content delivery. He also wants some files to have a password. You can add a custom field `DeliveryPolicy` on the ContentVersion object. Make the custom field a picklist with the values, `Allowed`, `Blocked`, and `Password required`. Add the field to the ContentVersion layout so that the user can set the delivery policy per file. Then, add an insert trigger for the ContentDistribution object to enforce the rules based on the delivery policy set in the file.

Note: The `ContentVersionId` for `ContentDistribution` must be unique.

This trigger for the ContentDistribution object enforces the delivery policy rules for each file:

```
trigger deliveryPolicy on ContentDistribution (before insert) {
    for (ContentDistribution cd : trigger.new) {
        String versionId = DeliveryPolicyHelper.getContentVersionId(cd);
        ContentVersion version = [select DeliveryPolicy__c from ContentVersion where
Id = :versionId];
        String policy = version.DeliveryPolicy__c;
        if (policy.equals('Blocked')) {
            cd.addError('This file is not allowed to be delivered.');
        } else if (policy.equals('Password required')){
            if (!DeliveryPolicyHelper.requirePassword(cd)) {
                cd.addError('To deliver this file, set a password.');
            }
        }
    }
}
```

The trigger calls this helper class:

```
public class DeliveryPolicyHelper {
    public static String getContentVersionId(ContentDistribution cd) {
        if (cd.ContentVersionId != null) {
            return cd.ContentVersionId;
        } else {
            String versionId = [select LatestPublishedVersionId from ContentDocument
where Id = :cd.ContentDocumentId].get(0).LatestPublishedVersionId;
            return versionId;
        }
    }

    public static boolean requirePassword(ContentDistribution cd) {
        return cd.PreferencesPasswordRequired;
    }
}
```

Important: Apex has a per organization limit of 10 concurrent requests that last longer than 5 seconds. A trigger that uploads files can easily hit this limit.

ContentDistributionView

Represents information about views of a shared document. This read-only object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Content deliveries must be enabled to query content deliveries.
- Users (including users with the "View All Data" permission) can query only the files that they have access to. If the file is managed by a Content Library, the user must have "Deliver Content" enabled in the library permission definition and be a member of the library. If the file isn't managed by a Content Library, the user must have the "Enable Creation of Content Deliveries for Salesforce Files" permission.
- ContentDistributionView can be deleted by an admin.
- If the shared document is deleted, the delete cascades to any associated ContentDistributionView. The ContentDistributionView is still queryable by using the `QueryAll` verb.
- Customer Portal users can't access this object.
- Chatter Free users can't access this object.

Fields

Field Name	Details
`DistributionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the content delivery that the document is part of.
`IsDownload`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if the shared document is downloaded; `false` if the shared document is viewed.
`IsInternal`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** `true` if the shared document is viewed by a user in the same organization; `false` if viewed by an external user.
`ParentViewId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of this instance of accessing the shared document.

Usage

Use this read-only object to query information about users who are accessing shared documents.

ContentDocument

Represents a document that has been uploaded to a library in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content. This object is available in API version 21.0 and later for Salesforce Files.

The maximum number of documents that can be published is 30,000,000. Archived files count toward this limit and toward storage usage limits.

- Contact Manager, Group, Professional, Enterprise, Unlimited, and Performance Edition customers can publish a maximum of 200,000 new versions per 24-hour period.
- Developer Edition and trial users can publish a maximum of 2,500 new versions per 24-hour period.

Supported Calls

`delete()`, `describeLayout()` `describeSObjects()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- Users (including users with the "View All Data" permission) can only query files they have access to, including:
  - All Salesforce CRM Content files in libraries they're a member of and in their personal library, regardless of library permissions (API version 17.0 and later).
  - All Salesforce Files they own, posted on their profile, posted on groups they can see, and shared directly with them (API version 21.0 and later).

- A Salesforce CRM Content document can be deleted if any of the following are true:
  - The document is published into a personal library or is in the user's upload queue.
  - The document is published into a public library, the user is a member of that library with the “Add Content” library privilege enabled, and the user trying to delete the document is the owner.
  - The document is published into a public library that has the “Delete Content” or “Manage Library” permission enabled, and the user trying to delete the document is not the owner.

For API version 25.0 and later, you can change ownership of Salesforce Files and Salesforce CRM Content documents.

- The following must be true to change ownership of a Salesforce CRM Content document:
  - The Salesforce CRM Content app must be enabled.
  - The user who is becoming the owner of the document must have a Salesforce CRM Content feature license.
- A user can change ownership of a Salesforce CRM Content document or Salesforce file if any of the following are true:
  - The user is the current owner, or has either the “Modify All Data” or "Manage Salesforce CRM Content” permission enabled.
  - The user has the “Manage Library” permission enabled for the library containing the document.

  Note:
  - The user who is becoming the owner of the document must be a visible user who is active, but the original owner can be inactive.
  - A document's owner can be changed to a user who doesn’t have access to the library that contains the document. Library administrators may need to give the new owner membership to the library.

Fields

Field	Details
`ArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the document. This field is available in API version 24.0 and later.
`ArchivedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date when the document was archived. This field is available in API version 24.0 and later.

Field	Details
ContentAssetId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** If the ContentDocument is an asset file, this field points to the asset. For most entities, the value of this field is `null`. This field is available in API version 38.0 and later.
ContentModifiedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date the document was modified. `ContentModifiedDate` updates when, for example, the document is renamed or a new document version is uploaded. When you're uploading the first version of a document, `ContentModifiedDate` can be set to the current time or any time in the past. This field is available in API version 32.0 and later.
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The size of the document in bytes. This field is available in API version 31.0 and later.
Description	**Type** textarea **Properties** Filter, Nillable, Sort **Description** A description of the document. This field is available in API version 31.0 and later.
Division	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension. This field is available in API version 31.0 and later.
`IsArchived`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the document has been archived (`true`) or not (`false`).
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update

Field	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LatestPublishedVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the latest document version (ContentVersion).
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the owner of this document.
`ParentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the library that owns the document. Created automatically when inserting a ContentVersion via the API for the first time. This field is available in API version 24.0 and later when Salesforce CRM Content is enabled.
`PublishStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Indicates if and how the document is published. Valid values are: • `P`—The document is published to a public library and is visible to other users. Label is **Public**. • `R`—The document is published to a personal library and is not visible to other users. Label is **Personal Library**. • `U`—The document is not published because publishing was interrupted. Label is **Upload Interrupted**.

Field	Details
SharingOption	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls whether sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
SharingPrivacy	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
Title	**Type** string **Properties** Filter, Group, Sort **Description** The title of a document.

Usage

- Use this object to retrieve, query, update, and delete the latest version of a document, but not a content pack, in a library or a Salesforce file. Use the ContentVersion object to create, query, retrieve, search, edit, and update a specific version of a Salesforce CRM Content document or Salesforce file.
- The `query()` call doesn't return archived documents. The `queryAll()` call returns archived documents.
- You can't add new versions of archived documents.
- To query a file that is shared only with a record, you must specify the content ID of the file.
- To create a document, create a new version via the ContentVersion object without setting the `ContentDocumentId`. This process automatically creates a parent document record. When adding a new version of the document, you must specify an existing `ContentDocumentId` which initiates the revision process for the document. When the latest version is published, the title, owner, and publish status fields are updated in the document.

- When you delete a document, all versions of that document are deleted, including ratings, comments, and tags.
- You can't create, edit, or delete content packs via the API.

  Note: Content metadata, such as tags, custom fields, and content owners are tracked at the version level rather than at the document level.

- If you query versions in the API, versions with a `PublishStatus` of `Upload Interrupted` are not returned.
- A document record is a container for multiple version records. You create a new version to add a document to the system. The new version contains the actual file data which allows the document to have multiple versions. The version stores the body of the uploaded document.
- Assign topics to ContentDocument using `TopicAssignment` in API version 37.0 or later.

SEE ALSO:

ContentDocumentFeed

ContentDocumentHistory

ContentVersion

ContentDocumentFeed

Represents a single feed item associated with ContentDocument. A content document feed shows these content document changes: creating a ContentDocument file and uploading a new ContentDocument. This object is available in versions 20.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the ContentDocument object
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort

Field	Details
	Description The content of ContentDocumentFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`.The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDate DESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Create, Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the document that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `Type ContentPost`.
`Title`	**Type** string **Properties** Create, Group, Nillable, Sort, Update **Description** The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type QuestionPost`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The type of FeedItem. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create FeedItem types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object.

Field	Details
	• `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a ContentDocument object.

SEE ALSO:

ContentDocument

ContentDocumentHistory

Represents the history of a document. This object is available in versions 17.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- A user can query all versions of a document from their personal library and any version that is part of or shared with a library where they are a member, regardless of library permissions.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the document.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`Field`	**Type** picklist **Properties** Filter, Group, Sort, Restricted picklist **Description** The name of the field that was changed. Possible values include: • `contentDocPublished`—The document is published into a library.

Field	Details
	• `contentDocUnpublished`—The document is archived or removed from a library, either directly or when the owning library is changed. • `contentDocRepublished`—The document is removed from the archive. • `contentDocFeatured`—The document is featured. • `contentDocSubscribed`—The document is subscribed to. • `contentDocUnsubscribed`—The document is no longer subscribed to.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this read-only object to query the history of a document.

SEE ALSO:

ContentDocument

ContentDocumentLink

Represents the link between a Salesforce CRM Content document or Salesforce file and where it's shared. A file can be shared with other users, groups, records, and Salesforce CRM Content libraries. This object is available in versions 21.0 and later for Salesforce CRM Content documents and Salesforce Files.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- Users (including users with the "View All Data" permission) can only query files they have access to, including:
  - All Salesforce CRM Content files in libraries they're a member of and in their personal library, regardless of library permissions (API version 17.0 and later).
  - All Salesforce Files they own, posted on their profile, posted on groups they can see, and shared directly with them (API version 21.0 and later).
- In API versions 33.0 and later, you can create and delete ContentDocumentLink objects with a `LinkedEntityId` of any record type that can be tracked in the feed, even if feed tracking is disabled for that record type.
- In API versions 25.0 and later, you can create ContentDocumentLink objects with a `LinkedEntityId` of type `User`, `CollaborationGroup`, or `Organization`.
- In API versions 21.0 and later, users with explicit Viewer access (the file has been directly shared with the user) to a file can delete ContentDocumentLink objects between the file and other users who have Viewer access. In the same API versions, any user with Viewer access to a file can deleteContentDocumentLink objects between the file and organizations or groups of which they are a member.
- For organizations with Communities enabled, a document can only be shared with users and groups that are a part of the community the file was created in.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the document.
`LinkedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the linked object. Can include Chatter users, groups, records (any that support Chatter feed tracking including custom objects), and Salesforce CRM Content libraries. Using the API only, you can relate notes to custom settings.
`ShareType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Required. The permission granted to the user of the shared file in a library. This is determined by the permission the user already has in the library. This field is available in API version 25.0 and later. **V** Viewer permission. The user can explicitly view but not edit the shared file. **C** Collaborator permission. The user can explicitly view and edit the shared file. **I** Inferred permission. The user's permission is determined by the related record. For shares with a library, this is defined by the permissions the user has in that library.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies whether this file is available to all users, internal users, or shared users. This field is available in API version 26.0 and later. `Visibility` can have the following values. • `AllUsers`—The file is available to all users who have permission to see the file. • `InternalUsers`—The file is available only to internal users who have permission to see the file. • `SharedUsers`—The file is available to all users who can see the feed to which the file is posted. SharedUsers is used only for files shared with users, and is available only when an org has private org-wide sharing on by default. The `SharedUsers` value is available in API version 32.0 and later. Note the following exceptions for `Visibility`. • `AllUsers` & `InternalUsers` values apply to files posted on standard and custom object records, but not to users, groups, or content libraries. • For posts to a record feed, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`. • For posts to a user feed, if the organization-wide default for user sharing is set to private, `Visibility` is set to `SharedUsers`. • Only internal users can update Visibility. • Visibility can be updated on links to files posted on standard and custom object records, but not to users, groups, or content libraries. • Visibility is updatable in API version 43.0 and later.

Field	Details
	The visibility setting on ContentDocumentLink determines a file's visibility on a record post. When a file has multiple references posted in a feed, the file's visibility is determined by the most visible setting.

Usage

Use this object to query the locations where a file is shared or query which files are linked to a particular location. For example, the following query returns a particular document shared with a Chatter group:

```
SELECT ContentDocument.title FROM ContentDocumentLink WHERE ContentDocumentId =
'069D00000000so2' AND LinkedEntityId = '0D5000000089123'
```

- You can't run a query without filters against ContentDocumentLink.
- You can't filter on ContentDocument fields if you're filtering by `ContentDocumentId`. You can only filter on ContentDocument fields if you're filtering by `LinkedEntityId`.
- You can't filter on the related object fields. For example, you can't filter on the properties of the account to which a file is linked. You can filter on the properties of the file, such as the title field.

A SOQL query must filter on one of `Id`, `ContentDocumentId`, or `LinkedEntityId`.

The ContentDocumentLink object supports triggers before and after these operations: insert, update, delete.

Example: This trigger for the ContentDocumentLink object prevents public XLSX files from being shared.

```
trigger NoShareXLSX on ContentDocumentLink (after insert) {
    for (ContentDocumentLink cdl : trigger.new) {
        if (!CDLHelper.isSharingAllowed(cdl)) {
            cdl.addError('Sorry, you cannot share this file.');
        }
    }
}
```

The trigger calls this helper class.

```
public class CDLHelper {

    /**
     * Gets FileExtension of the inserted content.
     */
    public static String getFileExtension(ContentDocumentLink cdl) {
        String fileExtension;
        String docId = cdl.ContentDocumentId;
       FileExtension = [select FileExtension from ContentVersion where ContentDocumentId
 = :docId].get(0).FileExtension;
        return FileExtension;
    }

    /**
     * Checks the file's PublishStatus and FileExtension to decide whether user can
share the file with others.
     * PublishStatus 'P' means the document is in a public library.
     */
```

```
    public static boolean isSharingAllowed(ContentDocumentLink cdl) {
        String docId = cdl.ContentDocumentId;
       ContentVersion version = [select PublishStatus,FileExtension from ContentVersion
 where ContentDocumentId = :docId].get(0);
        if (version.PublishStatus.equals('P') && (version.FileExtension != null &&
version.FileExtension.equals('xlsx'))) {
            return false;
        }
        return true;
    }

    /**
     * Gets the parent account name if the file is linked to an account.
     */
    public static String getAccountName(ContentDocumentLink cdl) {
        String name;
        String id = cdl.LinkedEntityId;
        if (id.substring(0,3) == '001') {
            name = [select Name from Account where Id = :id].get(0).Name;
        }
        return name;
    }
}
```

Important: Apex has a per organization limit of 10 concurrent requests that last longer than 5 seconds. A trigger that uploads files can easily hit this limit.

SEE ALSO:

ContentDocument

ContentDocumentSubscription

Represents a subscription for a user following or commenting on a file in a library. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
ContentDocumentId	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** ID of the file.
`IsCommentSub`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the user made comments on the file.
`IsDocumentSub`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the user follows the file.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user following or commenting on the file.

ContentFolder

Represents a folder in a content library for adding files. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- Salesforce CRM Content or Chatter must be enabled to access ContentFolder.
- All users with a content feature license can modify folders in their personal library.
- To modify a folder, the user must be a member of the library and have permission to modify folders.

Fields

Field Name	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the folder.
`ParentContentFolderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the ParentFolder.

ContentFolderItem

Represents a file (ContentDocument) or folder (ContentFolder) that resides in a ContentFolder in a ContentWorkspace. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Fields

Field Name	Details
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The file or folder size of the ContentFolderItem.

Field Name	Details
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the file extension if the ContentFolderItem is a file.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies the type of file if ContentFolderItem is a file.
IsFolder	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the ContentFolderItem is a folder, and not a file.
ParentContentFolderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ContentFolder that the ContentFolderItem resides in.
Title	**Type** string **Properties** Filter, Group, Sort **Description** The name of the file or folder.

Usage

ContentFolderLink

Defines the association between a library and its root folder. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Salesforce CRM Content must be enabled to access ContentFolderLink.
- ContentFolderLink is read-only in the context of a library.

Fields

Field Name	Details
`ContentFolderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the folder.
`EnableFolderStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the status of enabling folders for the library. Valid values are: • `C` — Completed folder enablement • `S` — Started folder enablement • `F` — Failed folder enablement This field is available in API version 39.0 and later.
`ParentEntityId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description Name of the entity the folder hierarchy is linked to.

ContentFolderMember

Defines the association between a file and a folder. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Salesforce CRM Content or Chatter must be enabled to access ContentFolderMember.
- All users with a content feature license can modify folders in their personal library.
- To modify ContentFolderMember, the user must be a member of the library and have permission to modify folders.

Fields

Field Name	Details
`ChildRecordId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the file.
`ParentContentFolderId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the folder the file is in.

ContentHubItem

Represents a file or folder in a Files Connect external data source, such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

Special Access Rules

Chatter and Files Connect must be enabled for the organization.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
ContentHubRepositoryId	**Type** reference **Properties** Filter, Group, Nillable **Description** The ID for the related external data source described by the ContentHubRepository object.
ContentModifiedDate	**Type** dateTime **Properties** Nillable **Description** Date the file or folder content last changed.
ContentSize	**Type** int **Properties** Group, Nillable **Description** File or folder size.
Description	**Type** string **Properties** Filter, Group, Nillable **Description** Explanation of item in external data source.
ExternalContentUrl	**Type** url

Field Name	Details
	Properties Group, Nillable **Description** The URL of the document content in the external data source.
ExternalDocumentUrl	**Type** url **Properties** Group, Nillable **Description** The URL of the detail page in the external data source.
ExternalId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** ID for the file or folder in the external data source.
FileExtension	**Type** string **Properties** Group, Nillable **Description** File format extension, such as .doc or .pdf
FileType	**Type** string **Properties** Group, Nillable **Description** Complete file type, such as “Microsoft Word Document.”
IsFolder	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether item is a folder or file.
MimeType	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable **Description** MIME type of the content.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the file or folder in the external data source.
`Owner`	**Type** string **Properties** Filter, Group, Nillable **Description** Username of the content owner in the external data source.
`ParentId`	**Type** string **Properties** Filter, Group, Nillable **Description** The ID of the parent folder for the record. This field isn't returned in queries or searches of the ContentHubItem object. It supports only WHERE clauses, such as the following: `WHERE ContentHubRepositoryId = <ID of external source> and ParentId = <ID of parent folder or record>.` Or specify `WHERE ParentId = <name of root folder>` to return the children of the root folder. Tip: The ParentId field supports both Salesforce IDs (in the format "0CHxxx") and external IDs.
`Title`	**Type** string **Properties** Group, Nillable

Field Name	Details
	Description The title that appears in the content, which often differs from the `Name` of the containing file or folder.
`UpdatedBy`	**Type** string **Properties** Group, Nillable **Description** Username for the person who last updated the file.

Usage

The following SOQL query examples show how to retrieve files and folders from a Files Connect external data source. These examples use placeholders for ID values for the repository ID and folder IDs. Before running these queries, replace the placeholders with valid ID values for your external data source and folders.

Important: You must filter queries and searches on ContentHubItem with the `ContentHubRepositoryId` field; for example, `SELECT Id FROM ContentHubItem WHERE ContentHubRepositoryId = <ID of external data source>`.

Example 1: Get the ID and name of the root folder in an external file source.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = NULL
```

Example 2: List all folders and files under the specified root folder.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<root folder ID>'
```

Example 3: List all external file data sources by querying ContentHubRepository.

```
SELECT DeveloperName
FROM ContentHubRepository
```

Example 4: List all files and folders in a given folder and external file source.

```
SELECT Id, Name
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<parent folder ID>'
```

Example 5: To return only folders in the result set, add `IsFolder = true` in the `WHERE` clause to a query that returns files and folders. For example, the following query lists all folders under the root folder.

```
SELECT Id, Name
FROM ContentHubItem
```

```
WHERE ContentHubRepositoryId = '<repository ID>' AND ParentId = '<root folder ID>'
      AND IsFolder = true
```

Example 6: Retrieve a link that is used to open the specified document in an external source.

```
SELECT ExternalDocumentUrl
FROM ContentHubItem
WHERE ContentHubRepositoryId = '<repository ID>' AND Id = '<document ID>'
```

SOSL Example: Retrieve the ID and name of all documents that contain the search string. The result set is limited to the first 10 documents.

```
FIND {<search string>}
RETURNING ContentHubItem(Id, Name
                         WHERE ContentHubRepositoryId = '<repository ID>')
LIMIT 10
```

ContentHubRepository

Represents a Files Connect external data source such as Microsoft SharePoint or OneDrive for Business. This object is available in API version 33.0 and later.

Special Access Rules

Chatter and Files Connect must be enabled for the organization.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field Name	Details
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for the external data source. This display value is the internal label and does not get translated.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The data source type. Possible values are: • contenthubGoogleDrive • contenthubOffice365 • contenthubOneDrive • contenthubSharepoint • contenthubBox • contenthubQuip

ContentNote

Represents a note created with the enhanced note taking tool, released in Winter '16. This object is available in API version 32.0 and later.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), query(), retrieve(), search(), update()

Special Access Rules

- Notes must be enabled.

Fields

Field	Details
Content	**Type** base64

Field	Details
	Properties Create, Nillable, Update **Description** The content or body of the note, which can include properly formatted HTML or plain text. When a document is uploaded or downloaded via the API, it should be base64 encoded (for upload) or decoded (for download). Any special characters within plain text in the `Content` field must be escaped. You can escape special characters by calling `content.escapeHtml4()`.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the note in bytes.
`CreatedById`	**Type** reference **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on createFilter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** ID of the user who created the note.
`CreatedDate`	**Type** dateTime **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on create, Filter, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** Date the note was created.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the note.
`FileType`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Type of file for the note. All notes have a file type of `SNOTE`.
`Id`	**Type** id **Properties** Defaulted on createFilter, Group, Nillable, Sort **Description** ID of the note.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the note has been deleted.
`IsReadOnly`	**Type** boolean **Properties** Defaulted on create, Group, Sort **Description** Indicates whether the note is read only.
`LastModifiedById`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** The ID of the user who last modified the note.
`LastModifiedDate`	**Type** dateTime **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on create, Filter, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** Date the note was last modified. Updates when the `Title` or `Content` of the note are updated.

Field	Details
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable Sort **Description** Date the note was last viewed. This field is available in API version 35.0 and later.
`LatestPublishedVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the ContentVersion for the latest published version of the note.
`OwnerId`	**Type** reference **Properties** Create (for users assigned the Set Audit Fields Upon Creation permission), Defaulted on create, Filter, Group, Sort, Update (for users assigned the Set Audit Fields Upon Creation permission) **Description** ID of the owner of the note.
`SharingPrivacy`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
`TextPreview`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A preview of the note's content. This field is available in API version 35.0 and later.

Field	Details
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Title of the note.

Usage

- Use ContentNote to create, query, retrieve, search, edit, and update notes.
- ContentNote is built on ContentVersion, and so it has many of the same usages.
- Not all fields can be set for notes. Only the `Content` and `Title` fields can be updated.
- The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion.
- You can convert old Note records to Lightning Experience, so users can view and edit notes from the Notes & Attachments related list in Lightning Experience. Users can edit their converted notes, which are accessible from the Notes related list and Notes tab. Copy old Note records to newly created ContentNote records. Users assigned the Set Audit Fields Upon Creation permission can set the owner, created date, and last modified date on ContentNote records.
- SOQL and SOSL queries on the ContentNote return only the most recent version of the note.
- To relate a note to a record, use `ContentDocumentLink`.

For example, the following Apex code creates a note and escapes any special characters so they are converted to their HTML equivalents.

Note: Apex code doesn't need to be encoded to base64 before it is uploaded and downloaded.

```
ContentNote cn = new ContentNote();
cn.Title = 'test1';
String body = 'Hello World. Before insert/update, escape special characters such as ", ',
 &, and other standard escape characters.';
cn.Content = Blob.valueOf(body.escapeHTML4());
insert(cn);
```

In this example, the following code creates a note using text that is already formatted as HTML, so it does not need to be escaped.

```
ContentNote cn = new ContentNote();
cn.Title = 'test2';
String body = '<b>Hello World. Because this text is already formatted as HTML, it does not
 need to be escaped.
Special characters such as &quot;, etc. must already use their HTML equivalents.</b>';
cn.Content = body;
insert(cn);
```

ContentNotification

Represents a notification for a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`EntityIdentifierId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the object with the notification.
`EntityType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of object with the notification. One of the following. • `ContentDocument` • `ContentTagName` • `ContentVersion` • `ContentWorkspace` • `ContentWorkspacePermission` • `User`
`Nature`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of notification.
`Subject`	**Type** textarea **Properties** Filter, Nillable, Sort

Field	Details
	Description Subject of the notification.
`Text`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Text of the notification.
`UsersId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who received the notification.

ContentTagSubscription

Represents a subscription for a user following a tag on a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user following the tag on the file.

ContentUserSubscription

Represents a subscription for a user following another user. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`SubscribedToUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who is followed by another user.
`SubscriberUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who follows another user.

ContentVersion

Represents a specific version of a document in Salesforce CRM Content or Salesforce Files. This object is available in versions 17.0 and later for Salesforce CRM Content documents. This object is available in versions 20.0 and later for Salesforce Files.

The maximum number of versions that can be published in a 24-hour period is 200,000.

Note: Depending on how files are shared, queries on ContentDocument and ContentVersion without specifying an ID won't return all files a user has access to. For example, if a user only has access to a file because they have access to a record that the file is shared with, the file won't be returned in a query such as "SELECT Id FROM ContentDocument."

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- Customer and Partner Portal users must have the “View Content in Portal” permission to query content in libraries where they have access.
- Customer and Partner Portal users can only publish, version, or edit documents if they have a Salesforce CRM Content feature license.
- All users with a content feature license can create versions in their personal library.
- Users (including users with the “View All Data” permission) can only query files they have access to, including:
  - All Salesforce CRM Content files in libraries they're a member of and in their personal library, regardless of library permissions (API version 17.0 and later).
  - All Salesforce Files they own, posted on their profile, posted on groups they can see, and shared directly with them (API version 21.0 and later).
- All users can update versions in their personal library.
- The owner of a version or document can update the document if they are a member of the library, regardless of library permissions.
- To update a Salesforce CRM Content document, the user must be a member of the library with one of these library privileges enabled:
  - “Add Content”
  - “Add Content On Behalf of Others”
  - “Manage Library”
- `FileType` is defined by either `ContentUrl` for links or `PathOnClient` for documents, but not both.
- In API version 34.0 and later, any file can be shared with libraries, whether the file originated in Chatter or in Salesforce CRM Content.
- In API version 39.0 and later, custom Apex download handlers can be created that can control access to documents. See the *Apex Developer Guide* for more information.

Fields

Field	Details
`Checksum`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** MD5 checksum for the file.
`ContentBodyId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Allows inserting a file version independently of the file blob being uploaded. This field is available for query and insert only. It can only point to a ContentBody record. This field is available in API version 40.0 and later.

Field	Details
ContentDocumentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the document.
ContentLocation	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Origin of the document. Valid values are: • **S**—Document is located within Salesforce. Label is **Salesforce**. • **E**—Document is located outside of Salesforce. Label is **External**. • **L**—Document is located on a social network and accessed via Social Customer Service. Label is **Social Customer Service**.
ContentModifiedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who modified the document.
ContentModifiedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** Date the document was modified. `ContentModifiedDate` updates when, for example, the document is renamed or a new document version is uploaded. When uploading the first version of a document, `ContentModifiedDate` can be set to the current time or any time in the past.
ContentSize	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes. Always zero for links.

Field	Details
ContentUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL for links. This is only set for links. One of the fields that determines the `FileType`. The character limit in API versions 43.0 and later is 1,300. The character limit in API versions 32.0 and earlier was 255.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the content version.
Division	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as “North America,” “Healthcare,” or “Consulting.” Available only if the organization has the Division permission enabled.
ExternalDataSourceId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the external document referenced in the `ExternalDataSource` object.
ExternalDocumentInfo1	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Stores the URL of the file in the external content repository. The integration from the external source determines the content for this string. After the reference or copy is created, the URL of the external file is updated when you: • Republish a file reference in Lightning Experience

Field	Details
	• Open the document • Create a file reference in the Chatter REST API with `reuseReference` set to true. When the file is updated, the shared link is updated to the most current version.
`ExternalDocumentInfo2`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Contains the external file ID. Salesforce determines the content for this string, which is private. The content can change without notice, depending on the external system. After the file reference is created, this field isn't updated, even if the file path changes.
`FeaturedContentBoost`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. Designates a document as featured.
`FeaturedContentDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date the document was featured.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
`FileType`	**Type** string **Properties** Filter, Group, Sort **Description** Type of content determined by `ContentUrl` for links or `PathOnClient` for documents.

Field	Details
`FirstPublishLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the location where the version was first published. If the version is first published into a user's personal library or My Files, the field will contain the ID of the user who owns the personal library or My Files. If the first version is published into a public library, the field will contain the ID of that library. Accepts all record IDs supported by ContentDocumentLink (anything a file can be attached to, like records and groups). Setting `FirstPublishLocationId` allows you to create a file and share it with an initial record/group in a single transaction, and have the option to create more links to share the file with other records or groups later. When a file is created, it's automatically linked to the record, and PublishStatus will change to Public from Pending/Personal. This field is only set the first time a version is published via the API. `FirstPublishLocationId` can't be set to another ID when a new content version is inserted.
`IsAssetEnabled`	**Type** boolean **Properties** Create, Group, Defaulted on create **Description** Can be specified on insert of ContentVersion to automatically convert a ContentDocument file into a ContentAsset. This field can be SOQL queried, but it can't be edited. This field is available in API version 38.0 and later.
`IsEncrypted`	Note: This information is about Shield Platform Encryption and not Classic Encryption. **Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether files are encrypted using Shield Platform Encryption (`true`) or not (`false`). This field is available in API version 34.0 and later.
`IsLatest`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether this is the latest version of the document (`true`) or not (`false`).
`IsMajorVersion`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** `true` if the document is a major version; `false` if the document is a minor version. Major versions can't be replaced.
`Language`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist, Update **Description** The language for this document. This field defaults to the user's language unless the organization is multi-language enabled. Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
`NegativeRatingCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. The number of times different users have given the document a thumbs down. Rating counts for the latest version are not version-specific. If Version 1 receives 10 thumbs-down votes, and Version 2 receives 2 thumbs-down votes, the `NegativeRatingCount` on Version 2 is 12. However, rating counts are not retroactive for prior versions. The `NegativeRatingCount` on Version 1 is 10.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the community that this file originated from. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. You can only add a `NetworkId` when creating a file. You can't change or add a `NetworkId` for an existing file.

Field	Details
Origin	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The source of the content version. Valid values are: • **C**—Content document from the user's personal library. Label is **Content**. The `FirstPublishLocationId` must be the user's ID. If `FirstPublishLocationId` is left blank, it defaults to the user's ID. • **H**—Salesforce file from the user's My Files. Label is **Chatter**. The `FirstPublishLocationId` must be the user's ID. If `FirstPublishLocationId` is left blank, it defaults to the user's ID. Origin can only be set to **H** if Chatter is enabled for your organization. This field defaults to C. Label is **Content Origin**.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of this document.
PathOnClient	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The complete path of the document. One of the fields that determines the `FileType`. Note: Specify a complete path including the path extension in order for the document to be visible in the Preview tab.
PositiveRatingCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. The number of times different users have given the document a thumbs up. Rating counts for the latest version are not version-specific. If Version 1 receives 10 thumbs-up votes, and Version 2 receives 2 thumbs-up votes, the `PositiveRatingCount` on Version 2 is 12. However, rating counts are not retroactive for prior versions. The `PositiveRatingCount` on Version 1 is 10.

Field	Details
PublishStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Indicates if and how the document is published. Valid values are: • P—The document is published to a public library and is visible to other users. Label is **Public**. • R—The document is published to a personal library and is not visible to other users. Label is **Personal Library**. • U—The document is not published because publishing was interrupted. Label is **Upload Interrupted**.
RatingCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Read only. Total number of positive and negative ratings.
ReasonForChange	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The reason why the document was changed. This field can only be set when inserting a new version (revising) a document.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type of the version. Custom fields are restricted in RecordTypeId. When an administrator creates a custom field via the API it must be added to at least one page layout: • If the custom field is added to the page layout associated with the General record type, the RecordTypeId that corresponds to that record type does not have to be set on the version record.

Field	Details
	• If the custom field is added to the page layout associated with a custom record type, the `RecordTypeId` that corresponds to that record type must be set on the version record.
`SharingOption`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls whether sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Allowed`, which means that new shares are allowed. When set to `Restricted`, new shares are prevented without affecting existing shares. This field is available in API versions 35.0 and later.
`SharingPrivacy`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls sharing privacy for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default is `Visible to Anyone With Record Access`. When set to `Private on Records`, the file is private on records but can be shared selectively with others. This field is available in API versions 41.0 and later.
`TagCsv`	**Type** textarea **Properties** Create, Nillable, Sort, Update **Description** Text used to apply tags to a content version via the API.
`TextPreview`	**Type** string **Properties** Nillable, Filter,Group, Sort **Description** A preview of a document. Available in API version 35.0 and later.
`Title`	**Type** string

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The title of a document.
`VersionData`	**Type** base64 **Properties** Create, Nillable, Update **Description** The content or body of the note, which can include properly formatted HTML or plain text. When a document is uploaded or downloaded via the API, it should be base64 encoded (for upload) or decoded (for download). Any special characters within plain text in the `Content` field must be escaped. You can escape special characters by calling `content.escapeHtml4()`. This field can't be set for links. The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64 and stored in `VersionData`. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion. If a custom Apex download handler is active, this field is accessed from the API, and the download is not allowed, Salesforce will return a `CONTENT_CUSTOMIZED_DOWNLOAD_EXCEPTION` error.
`VersionNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The version number. The number increments with each version of the document, for example, 1, 2, 3.

Usage

- Use this object to create, query, retrieve, search, edit, and update a specific version of a Salesforce CRM Content document or Salesforce file. Use the ContentDocument object to retrieve, query, update, and delete the latest version of a document, but not a content pack, in a library or a Salesforce file.
- Use this object to create, query, retrieve, search, edit, and update a specific version of a Salesforce file. Use the ContentDocument object to retrieve, query, update, and delete the latest version of a Salesforce file.
- To query a file that is shared only with a record, you must specify the content ID of the file.
- Not all fields can be set for Salesforce Files.

- You can only update a version if it is the latest version and if it is published.
- You can't archive versions.
- Using API version 32.0 and later, you can update record types on versions.
- You can't delete a version via the API.
- The maximum file size you can upload via the SOAP API is 50 MB. When a document is uploaded or downloaded via the API, it is converted to base64 and stored in `VersionData`. This conversion increases the document size by approximately 37%. Account for the base64 conversion increase so that the file you plan to upload is less than 50 MB after conversion.
- To download a document via the API, you must export the `VersionData` of the document. This does not increase the download count.
- When you upload a document from your local drive using the Data Loader, you must specify the actual path in both `VersionData` and `PathOnClient`. `VersionData` identifies the location and extracts the format and `PathOnClient` identifies the type of document being uploaded.
- SOQL queries on the ContentVersion object return all versions of the document. SOSL searches on the ContentVersion object return only the most recent version of the document.
- If you query versions in the API, versions with a `PublishStatus` of `Upload Interrupted` are not returned.
- Documents published into a personal library assume the default record type that is set for the user profile of the person publishing the document (General, if no default is set for the user profile).

  Note: An administrator can rename the default (*Content Version Layout*) page layout.

- Contact Manager, Group, Professional, Enterprise, Unlimited, and Performance Edition customers can publish a maximum of 200,000 new versions per 24–hour period. Developer Edition and trial users can publish a maximum of 2,500 new versions per 24–hour period.
- Custom validation rules can prevent an update of documents published into a personal library via the API.

Applying Tags to ContentVersion Records

Tags can be applied to ContentVersion records using either Enterprise or Partner API.

To apply tags to a ContentVersion record, set a value in the `TagCsv` field. For example, setting this field to `one,two,three` creates and associates three tags to that version.

- The maximum length of the `TagCsv` field is 2,000 characters.
- The maximum length of an individual tag is 100 characters.
- When tags are applied to a version, the content is indexed automatically and the tags are searchable.
- You can't apply tags to a `TagCsv` that is published into a personal library.
- You can't apply tags using the ContentDocument object.
- You can't change or delete tag names. You can remove tags from a document, but that doesn't delete the tag.
- Tags are case insensitive. You can't have two tags with the same name even if they use different uppercase and lowercase letters. The case of the original tag is always used.

To delete tags from a ContentVersion record, perform a standard API update, and remove any values from the `TagCsv` field that you want to delete. For example, if the original `TagCsv` is `one,two,three`, perform an API update specifying `one,three` in the `TagCsv` field to delete `two`. To delete all tags from a ContentVersion you perform a standard API update by setting the field to `null`.

If you create a ContentVersion record and want to revise it via the API, you insert another ContentVersion record but associate it to the same ContentDocument record as the original. This has an impact on tagging:

- If you insert the revision and do not set any value in the `TagCsv` field, any tags applied to the previous version are automatically applied to the new version.
- If you insert the revision and specify a new `TagCsv` field, no tags transfer over and the tags you specify are applied instead.

When you perform a SOQL query for a ContentVersion record and select the `TagCsv` field, all the tags associated with that record are returned. The tags in the string are always ordered alphabetically even if they were inserted in a different order. You can't use the `TagCsv` field as part of a filter in a SOQL query. You can't query all tags in your organization.

Library tagging rules:

- API tagging respects the tagging restrictions that exist on any library that the document is published into. For example, if the library is in restricted tagging mode and only allows tags `one,three`, you can't save a version with a `TagCsv` of `one,two,three`.
- If the library is in guided tagging mode, you can apply tags to the ContentVersion. You can't query the value of guided tags on a library, but you can query the tagging model of a library.

SEE ALSO:

ContentDocument

ContentVersionHistory

ContentVersionComment

Represents a comment on a version of a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the file.
`ContentVersionId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the version of the file.
`UserComment`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** ID of the user who commented on the file.

ContentVersionHistory

Represents the history of a specific version of a document. This object is available in version 17.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission to query content in libraries where they have access.
- A user can query all versions of a document from their personal library and any version that is part of or shared with a library where they are a member, regardless of library permissions.

Fields

Field	Details
`ContentVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the version.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort

Field	Details
	Description A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed. Possible values include: • `contentVersionCreated`—A new version is created. • `contentVersionUpdated`—The title, description, or any custom field on the version is changed. • `contentVersionDownloaded`—A version is downloaded. • `contentVersionViewed`—The version details are viewed. • `contentVersionRated`—The version is rated. • `contentVersionCommented`—The version receives a comment. • `contentVersionDataReplaced`—The new version replaces the previous version, which can happen only when the new version is uploaded immediately after the previous version.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this read-only object to query the history of a document version.

SEE ALSO:

ContentVersion

ContentVersionRating

Represents a rating on a version of a file. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the version of the file.
`Rating`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Rating of the file.
`UserComment`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Comment made by the user who rated the file.

Field	Details
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who rated the file.

ContentWorkspace

Represents a content library. This object is available in versions 17.0 and later.

Note: This object does not apply to personal libraries.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Note: create( ), update( ) and delete( ) on ContentWorkspace are supported in API version 40.0 and later only.

Special Access Rules

- The Access Libraries user permission allows orgs to make libraries available to users without requiring that they have the legacy Salesforce CRM Content license. This permission is available for profiles and permission sets on most standard user licenses, and is not available for High Volume Customer Portal, Customer Community, or Chatter Free licenses. Available in API versions 40.0 and later.
- Users with the Create Libraries user perm or the Manage Salesforce CRM Content administrator permission can create libraries (ContentWorkspaces) from the Libraries tab in Salesforce Classic and from the API.
- Customer and Partner Portal users can only edit the library document object if they have a Salesforce CRM Content feature license.
- Customer and Partner Portal users can query this object if they have the "View Content in Portal" permission. A user can query all public libraries where they are members, regardless of library permissions.

Fields

Field	Details
DefaultRecordTypeId	**Type** reference **Properties** Filter, Nillable

Field	Details
	Description ID of the default content type for the library. Content types are the containers for custom fields in Salesforce CRM Content.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable,Update **Description** Text description of the content library.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the library in the API. Allows a link to the library to be packaged when an asset file is added to a package. Although libraries are not a packageable entity, references to libraries with a developer name will be included in the package when asset files are packaged. These links can then be restored in the target org. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Label is Unique Name. This field is available in API version 39.0 and later.
`IsRestrictContentTypes`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Read only. Indicates whether content types have been restricted (`true`) or not (`false`).
`IsRestrictLinkedContentTypes`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Read only. Indicates whether linked content types have been restricted (`true`) or not (`false`).

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Name of the library.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique name of the library in the API. Allows a link to the library to be packaged when an asset file is added to a package. Limit: 15 characters. This field is available in API version 39.0 and later.
RootContentFolderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of root folder of the library. This field is available in API version 39.0 and later.
ShouldAddCreatorMembership	**Type** boolean **Properties** Create, Defaulted on create, Group **Description** Automatically create a library membership for the user creating the library. Please note this field is not meant for query and always returns false in query. This field is available in API version 40.0 and later.
TagModel	**Type** picklist **Properties** Defaulted on create, Filter, Nillable, Restricted picklist **Description** The type of tagging assigned to a library. Valid values are: • U — Unrestricted. No restrictions on tagging. Users can enter any tag when publishing or editing content. • G — Guided. Users can enter any tag when publishing or editing content, but they are also offered a list of suggested tags.

Field	Details
	• `R` — Restricted. Users must choose from a list of suggested tabs.
`WorkspaceImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of a library image. Image files can be assigned to libraries for branding and easy identification. Library image is visible to all users, even if they are not library members. This field is available in API version 43.0 and later.
`WorkspaceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Differentiates between different types of libraries. Valid values are: • `R` — Regular library • `B` — Org asset library This field is available in API version 39.0 and later.

Usage

Use this object to query libraries to find out where documents can be published.

If the content type is not specified when publishing a new version into a library, it will be determined by the `DefaultRecordTypeId` of the primary library.

As of 40.0, you can create, update, or delete a library via the API.

SEE ALSO:

ContentWorkspaceDoc

ContentWorkspaceDoc

Represents a link between a document and a public library in Salesforce CRM Content. This object is available in versions 17.0 and later.

Note: This object does not apply to documents and versions in a personal library.

Supported Calls

`create()`, `delete()`, `describeSObjects()` `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Customer and Partner Portal users must have the "View Content in Portal" permission in order to query and obtain content in libraries where they have access.
- Customer and Partner Portal users can only edit documents if they have a Salesforce CRM Content feature license.
- To create a ContentWorkspaceDoc, you must be a member of the library with one of these library privileges enabled:
  - "Add Content"
  - "Add Content On Behalf of Others"
  - "Manage Library"
- To query all library documents in a library, a user must be a member of that library, regardless of library permissions.

Fields

Field	Details
`ContentDocumentId`	**Type** reference **Properties** Create, Filter **Description** Read only. ID of the library document.
`ContentWorkspaceId`	**Type** reference **Properties** Create, Filter **Description** Read only. ID of the library.
`IsOwner`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Read only. Indicates whether the library owns the document and determines permissions for that document (`true`) or not (`false`). Documents can belong to more than one library, but only one library owns the document and determines its permissions.

Usage

- Use this object to link a document to one or more libraries.

- To share a document with additional libraries, create additional ContentWorkspaceDoc records which join the document to the additional libraries.
- Inserting a ContentWorkspaceDoc triggers the publish process for public libraries.
- A document can be published into many public libraries, but it will always be owned by one library which controls the security of the document.
- A document can only be published into the document owner's personal library. You can't publish into another user's personal library. Personal libraries are not visible via the API.
- To publish a document into a personal library, you must specify your user ID as the first publish location ID. If you leave the first publish location ID blank, it defaults to the current user's ID.
- A document can be published from a personal library into a public library, but once it has been published into the public library, it can't be published into the personal library again.
- You can't publish a document from a personal library into a public library that has restricted content types.
- You can't update or delete a library document via the API.

SEE ALSO:

ContentWorkspace

ContentWorkspaceMember

Represents a member of a content library. This object is available in API version 40.0 and later.

Manage library membership from the API.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Special Access Rules

A user can create/update/delete memberships if they have the Manage Salesforce CRM Content admin perm or the Manage Library permission for the library concerned.

Fields

Field	Details
`ContentWorkspaceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the library.

Field	Details
ContentWorkspacePermissionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The id of the library permission or role.
MemberId	**Type** reference **Properties** Create, Filter, Group,Namepointing, Sort **Description** ID of the library member (the member is either a user or a group).
MemberType	**Type** picklist **Properties** Filter, Group, Nillable,Restricted picklist, Sort **Description** The type of library member. Valid values are: • G - Group • U - User

Usage

Use this object to create, update, or delete members from a library.

ContentWorkspacePermission

Represents a library permission. This object is available in API version 40.0 and later.

A library permission is a group of privileges assigned to each content library member. It determines which tasks a member can perform in a particular library. The same user can have a different library permission in each of his or her libraries.

Note: Library permissions do not apply to personal libraries. All library users can save files in their personal libraries.

Supported Calls

`create(),delete(), query(), retrieve(),update()`

Special Access Rules

The ability to create permissions requires either the Manage Salesforce CRM Content admin perm or the Manage Content Permissions user perm.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description**
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Name of the library.
`PermissionsAddComment`	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to post comments to any content in the library and view all comments in the library. Users can edit or delete their own comments.
`PermissionsAddContent`	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to publish new content to the library, upload new content versions, or restore archived (deleted) content. Content authors can also change any tags associated with their content and archive or delete their own content.
`PermissionsAddContentOBO`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Permission for user to choose an author when publishing content in the library.
PermissionsArchiveContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to archive and restore any content in the library.
PermissionsChatterSharing	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to make content from this library accessible outside of the library, sharing with a record or in Chatter. From a record or from Chatter, select a file from the library and attach it to a record or a post.
PermissionsDeleteContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to delete any content in the library. Authors can undelete their own content from the Recycle Bin.
PermissionsDeliverContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to share content outside the org via a content delivery or public link.
PermissionsFeatureContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to identify any content in the library as “featured.”

Field	Details
PermissionsManageWorkspace	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to perform any action in the library. This privilege is required to edit a library's name and description, add or remove library members, or delete a library. Manage Library is a super permission which provides all other permission options listed except Deliver Content. Creating a library requires the Manage Salesforce CRM Content app permission or Create Libraries system permission.
PermissionsModifyComments	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to edit or delete comments made to any content in the library.
PermissionsOrganizeFileAndFolder	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to create, rename, and delete folders in libraries.
PermissionsTagContent	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to add tags when publishing content or editing content details in the library.
PermissionsViewComments	**Type** boolean **Properties** Create, Filter, Update **Description** Permission for user to view comments.
Type	**Type** picklist

Field	Details
	Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides the type of access a user has to a library. Valid values are: • Library Administrator • Author • Viewer • Custom

ContentWorkspaceSubscription

Represents a subscription for a user following a library. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Modify All Data permission have access to this object.

Fields

Field	Details
`ContentWorkspaceId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the library.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user following the library.

Contract

Represents a contract (a business agreement) associated with an Account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort,Update **Description** Required. ID of the Account associated with this contract.
`ActivatedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort,Update **Description** ID of the User who activated this contract.
`ActivatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** Date and time when this contract was activated.
`BillingAddress`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.

Field	Details
BillingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address. Maximum size is 40 characters.
BillingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address of this account. Maximum size is 80 characters.
BillingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the contract's billing address.
BillingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
BillingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
BillingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Details for the billing address of this account. Maximum size is 20 characters.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Details for the billing address. Maximum size is 80 characters.
BillingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the contract's billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address.
CompanySignedDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which the contract was signed by your organization.
CompanySignedId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the User who signed the contract.
ContractNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field	Details
	Description Number of the contract.
ContractTerm	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of months that the contract is valid.
CustomerSignedDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which the customer signed the contract.
CustomerSignedId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Contact who signed this contract.
CustomerSignedTitle	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title of the customer who signed the contract.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the contract.
EndDate	**Type** date **Properties** Filter, Group, Nillable, Sort,

Field	Details
	Description Read-only. Calculated end date of the contract. This value is calculated by adding the `ContractTerm` to the `StartDate`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastApprovedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Last date the contract was approved.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.

Field	Details
OwnerExpirationNotice	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Number of days ahead of the contract end date (15, 30, 45, 60, 90, and 120). Used to notify the owner in advance that the contract is ending.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the contract.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the pricebook, if any, associated with this contract.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
ShippingAddress	**Type** address **Properties** Filter, Nillable **Description** The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Create, Filter, Nillable, Update

Field	Details
	Description Details of the shipping address. City maximum size is 40 characters.
ShippingCountry	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. Country maximum size is 80 characters.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the contract's shipping address.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with ShippingLongitude to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with ShippingLatitude to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. Postal code maximum size is 20 characters.
ShippingState	**Type** string

Field	Details
	Properties Create, Filter, Nillable, Update **Description** Details of the shipping address. State maximum size is 80 characters.
`ShippingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the contract’s shipping address.
`ShippingStreet`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The street address of the shipping address. Maximum of 255 characters.
`SpecialTerms`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Special terms that apply to the contract.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort,Update **Description** Start date for this contract. Label is **Contract Start Date**.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The picklist of values that indicate order status. Each value is within one of two status categories defined in `StatusCode`. For example, the status picklist may contain: Ready to Ship, Shipped, Received as values within the Activated `StatusCode`.

Field	Details
`StatusCode`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status category for the contract. A contract can be Draft, InApproval, or Activated. Label is **Status Category**.

Usage

The Contract object represents a business agreement.

The `Status` field specifies the current state of a contract. Status strings (defined in the ContractStatus object) represent its current state (Draft, InApproval, or Activated).

Client applications must initially create a Contract in a non-Activated state. Client applications can subsequently activate a Contract by updating it and setting the value in its `Status` field to Activated; however, the `Status` field is the only field you can update when activating the Contract.

Once a Contract has been activated, your client application can't change its status; however, prior to activation, your client application can change the status value from Draft to InApproval via the API. Also, your client application can delete contracts whose status is Draft or InApproval but not when a contract status is Activated.

Client applications can use the API to create, update, delete, and query any Attachment associated with a contract.

SEE ALSO:
ContractContactRole
ContractHistory
ContractStatus

ContractContactRole

Represents the role that a given Contact plays on a Contract.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the Contact associated with this Contract.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Contract.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort,Update **Description** Specifies whether this Contact plays the primary role on this Contract (`true`) or not (`false`). Note that each contract has only one primary contact role. Default is `false`. Labels is **Primary**.
`Role`	**Type** picklist **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Name of the role played by the Contact on this Contract, such as Decision Maker, Approver, Buyer, and so on. Must be unique—there can't be multiple records in which the `ContractId`, `ContactId`, and `Role` values are identical. Different contacts can play the same role on the same contract. A contact can play different roles on the same contract.

Usage

Use the ContractContactRole object to define the role that a given Contact plays on a given Contract within the context of a specific Opportunity.

SEE ALSO:

ContractStatus

ContractFeed

Represents a single feed item in the feed on the contract record detail page. This object is available in API version 18.0 and later.

A contract feed shows recent changes to a contract record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to contracts in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Contract object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of ContractFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort

Field	Details
	Description The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string

Field	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.

Field	Details
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the contract record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a contract record.

SEE ALSO:

Contract

EntitySubscription

NewsFeed

UserProfileFeed

ContractHistory

Represents the history of changes to the values in the fields of a contract.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
ContractId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Contract. Label is Contract ID.
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to a contract.

This object respects field level security on the parent object.

SEE ALSO:

ContractStatus

ContractLineItem

Represents a product covered by a service contract (customer support agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Required. ID of the Asset associated with the contract line item. Must be a valid asset ID.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the contract line item.
`Discount`	**Type** percent **Properties** Create, Filter, Nillable, Update **Description** The discount for the product as a percentage. When updating, if you specify `Discount` without specifying `TotalPrice`, the `TotalPrice` will be adjusted to accommodate the new `Discount` value, and the `UnitPrice` will be held constant.

Field	Details
	If you specify both `Discount` and `Quantity`, you must also specify either `TotalPrice` or `UnitPrice` so the system can determine which one to automatically adjust.
`EndDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The last day the contract line item is in effect.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Update **Description** Automatically-generated number that identifies the contract line item.
`ListPrice`	**Type** currency **Properties** Filter, Nillable **Description** Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard pricebook or a custom pricebook. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the pricebook entry list price.

Field	Details
ParentContractLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The line item's parent line item, if it has one.
PricebookEntryId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the associated PricebookEntry. Only exists if Product2 is enabled.
Product2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The product related to the contract line item.
Quantity	**Type** double **Properties** Create, Filter, Update **Description** Number of units of the contract line item (product) included in the associated service contract.
RootContractLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level line item in a contract line item hierarchy. Depending on where a line item lies in the hierarchy, its root could be the same as its parent.
ServiceContractId	**Type** reference **Properties** Create, Filter

Field	Details
	Description Required. ID of the ServiceContract associated with the contract line item. Must be a valid asset ID.
`StartDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The first day the contract line item is in effect.
`Status`	**Type** picklist **Properties** Filter, Nillable **Description** Status of the contract line item.
`Subtotal`	**Type** currency **Properties** Filter, Nillable **Description** Contract line item's sales price multiplied by the `Quantity`.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable **Description** This field is available only for backward compatibility. It represents the total price of the ContractLineItem If you specify `Discount` and `Quantity`, this field or `UnitPrice` is required. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update request. To insert the `TotalPrice` for a contract line item via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Update

Field	Details
	Description The unit price for the contract line item. In the user interface, this field's value is calculated by dividing the total price of the contract line item by the quantity listed for that line item. Label is **Sales Price**. This field or `TotalPrice` is required. You can't specify both. If you specify `Discount` and `Quantity`, this field or `TotalPrice` is required.

SEE ALSO:

ContractLineItemHistory

ContractLineItemHistory

Represents the history of changes to the values in the fields on a ContractLineItem (items in a customer support agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ContractLineItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the ContractLineItem.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to a contract line item.

This object respects field level security on the parent object.

SEE ALSO:

ContractLineItem

ContractStatus

Represents the status of a Contract, such as Draft, InApproval, Activated, Terminated, or Expired.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default contract status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this contract status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the contract status picklist. These numbers are not guaranteed to be sequential, as some previous contract status values might have been deleted.
`StatusCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Code indicating the status of a contract. One of the following values: • `Draft` • `InApproval` • `Activated` Two other values (`Terminated` and `Expired`) are defined but are not available for use via the API.

Usage

This object represents a value in the contract status picklist. The contract status picklist provides additional information about the status of a Contract, such as its current state (`Draft`, `InApproval`, or `Activated`). You can query these records to retrieve the set of values in the contract status picklist, and then use that information while processing Contract objects to determine more information about a given contract. For example, the application could test whether a given contract is activated based on its `Status` value and the value of the `StatusCode` property in the associated ContractStatus object.

SEE ALSO:

ContractContactRole

ContractTag

Associates a word or short phrase with a Contract.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string

Field Name	Details
	Properties Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ContractTag stores the relationship between its parent TagDefinition and the Contract being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

CorsWhitelistEntry

Cross-Origin Resource Sharing (CORS) enables web browsers to request resources from origins other than their own (cross-origin). For example, using CORS, JavaScript code at `https://www.example.com` could request a resource from `https://www.salesforce.com`. To access supported Salesforce APIs, Apex REST resources, and Lightning Out from JavaScript code in a web browser, add the origin serving the code to a Salesforce CORS whitelist.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `upsert()`

Fields

Field Name	Details
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** This picklist contains the following fully-supported languages: • Chinese (Simplified): zh_CN • Chinese (Traditional): zh_TW • Danish: da • Dutch: nl_NL • English: en_US • Finnish: fi • French: fr • German: de • Italian: it • Japanese: ja • Korean: ko • Norwegian: no • Portuguese (Brazil): pt_BR • Russian: ru

Field Name	Details
	• Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th`
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Master label for the CORS whitelist entry.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For managed packages, this field is the namespace prefix assigned to the package. For unmanaged packages, this field is blank.
`UrlPattern`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The origin URL pattern must include the HTTPS protocol (unless you're using your localhost) and a domain name, and can include a port. The wildcard character (*) is supported and must be in front of a second-level domain name. For example, `https://*.example.com` adds all subdomains of `example.com` to the whitelist. The origin URL pattern can be an IP address. However, an IP address and a domain that resolve to the same address are not the same origin, and you must add them to the CORS whitelist as separate entries.

Usage

CORS is a W3C recommendation that enables web browsers to request resources from origins other than their own (cross-origin request). For example, using CORS, a JavaScript script at `https://www.example.com` could request a resource from `https://www.salesforce.com`.

If a browser that supports CORS makes a request to an origin in the Salesforce CORS whitelist, Salesforce returns the origin in the `Access-Control-Allow-Origin` HTTP header, along with any additional CORS HTTP headers. If the origin is not included in the whitelist, Salesforce returns HTTP status code 403.

Important: CORS does not support requests for unauthenticated resources, including OAuth endpoints. You must pass an OAuth token with requests that require it.

CronJobDetail

Contains details about the associated scheduled job, such as the job's name and type. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`JobType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the associated scheduled job. The following are the available job types. Each job type label is listed with its value in parenthesis. Use the job type value when querying for a specific job type. • Data Export (0) • Weekly Export (1) • Test (2) • Dashboard Refresh (3) • Reporting Snapshot (4) • System (5) • Scheduled Apex (7) • Report Run (8) • Batch Job (9) • Analytics Notification (A) • Duns Right Async Batch Monitor (B) • Scheduled ELT Dataflow (C) • Sitemap Generation (E)
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort,

Field	Details
	Description The name of the associated scheduled job.

Usage

Use this object to query additional information about a scheduled job, such as the job's name and type.

CronTrigger

Contains schedule information for a scheduled job. CronTrigger is similar to a cron job on UNIX systems. This object is available in API version 17.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CronExpression`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The cron expression used to initiate the schedule. Syntax: ***Seconds Minutes Hours Day_of_month Month Day_of_week Optional_year*** See `schedule(jobName, cronExpression, schedulableClass)` in the *Apex Developer Guide*.
`CronJobDetailId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the CronJobDetail record containing more details about this scheduled job.

Field	Details
EndTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the job either finished or will finish.
NextFireTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The next date and time the job is scheduled to run. `null` if the job is not scheduled to run again.
OwnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Owner of the job.
PreviousFireTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date and time the job ran. `null` if the job has not run before current local time.
StartTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the most recent iteration of the scheduled job started.
State	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The current state of the job. The job state is managed by the system. Possible values are: • WAITING—The job is waiting for execution. • ACQUIRED—The job has been picked up by the system and is about to execute. • EXECUTING—The job is executing. • COMPLETE—The trigger has fired and is not scheduled to fire again. • ERROR—The trigger definition has an error. • DELETED—The job has been deleted. • PAUSED—A job can have this state during patch and major releases. After the release has finished, the job state is automatically set to WAITING or another state. • BLOCKED—Execution of a second instance of the job is attempted while one instance is running. This state lasts until the first job instance is completed. • PAUSED_BLOCKED—A job has this state due to a release occurring. When the release has finished and no other instance of the job is running, the job's status is set to another state.
TimesTriggered	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times this job has been triggered.
TimeZoneSidKey	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Returns the timezone ID. For example, America/Los_Angeles.

Usage

Use this object to query scheduled jobs in your organization.

CurrencyType

Represents the currencies used by an organization for which the multicurrency feature is enabled.

Supported Calls

`create()`, `describeSObjects()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Special Access Rules

- This object is not available in single-currency organizations.
- You need the "Customize Application" permission to edit this object.
- Your client application can't delete this object.
- Customer Portal users can't access this object.

Fields

Field	Details
`ConversionRate`	**Type** double **Properties** Filter **Description** Required. Conversion rate of this currency type against the corporate currency.
`DecimalPlaces`	**Type** int **Properties** Filter **Description** Required. For this currency, specifies the number of digits to the right of the decimal point, such as zero (`0`) for JPY or `2` for USD.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether this currency type is active (`true`) or not (`false`). Inactive currency types do not appear in picklists in the user interface. Label is **Active**. This field defaults to `false` if no value is provided when updating or inserting a record.
`IsCorporate`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Indicates whether this currency type is the corporate currency (`true`) or not (`false`). Label is **Corporate Currency**. All other currency conversion rates are applied against this corporate currency. If a currency is already defined as the corporate currency in the user interface, it can't be unset. When a non-corporate currency is set to a corporate currency, the system reconfigures all conversion rates based on the new corporate currency.
`IsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Required. ISO code of the currency. Must be one of the valid alphabetic, three-letter currency ISO codes defined by the ISO 4217 standard, such as `USD`, `GBP`, or `JPY`. Must be unique within your organization. Label is **Currency ISO Code**.

Usage

This object is for multicurrency organizations only. Use this object to define the currencies your organization uses.

When updating an existing record, make sure to provide values for all fields to avoid undesired changes to the CurrencyType. For example, if a value for `IsActive` is not provided, the default (`false`) is used, which could result in a currently active CurrencyType becoming inactive.

SEE ALSO:

DatedConversionRate

Object Basics

CustomBrand

Represents a custom branding and color scheme. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the parent entity that this branding applies to. The parent entity can be either a network, organization, topic, or reputation level. The branding applies to the entity that the `ParentId` references. For example, if the `ParentId` references a network ID, the branding applies to that network (community) only, and if the `ParentId` references an organization ID, the branding applies to the organization that it is accessed through, and so on. Label is `Branded Entity ID`.

Usage

Use this object along with CustomBrandAsset to apply a custom branding scheme to your community. The branding scheme for the community shows in both the user interface and in the Salesforce app. You must have "Create and Manage Communities" to customize community branding.

You can also use this object to apply a custom branding scheme to your organization when it is accessed through the Salesforce app.

SEE ALSO:

Network

CustomBrandAsset

Represents a branding element in a custom branding scheme. For example, a color, logo image, header image, or footer text. A CustomBrandAsset can apply to a community or to an org using the Salesforce app. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
AssetCategory	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Values include: • MotifZeronaryColor—The background color for the header. Label is Zeronary motif color. If this CustomBrandAsset is for a network, this is the header color for the network. If it is for an org, this is the header color when users access the Salesforce app. • MotifPrimaryColor—The color used for the active tab. Label is Primary motif color. Not used for the Salesforce app branding. • MotifSecondaryColor—The color used for the top borders of lists and tables. Label is Secondary motif color. Not used for the Salesforce app branding. • MotifTertiaryColor—The background color for section headers on edit and detail pages. Label is Tertiary motif color. Not used for the Salesforce app branding. • MotifQuaternaryColor—If this CustomBrandAsset is for a network, this is the background color for network pages. If it is for an org, this is the background color on a splash page. Label is Quaternary motif color. • MotifZeronaryComplementColor—Font color used with zeronaryColor. Label is Zeronary motif colors complement color. • MotifPrimaryComplementColor—Font color used with primaryColor. Label is Primary motif colors complement color. Not used for the Salesforce app branding. • MotifTertiaryComplementColor—Font color used with tertiaryColor. Label is Tertiary motif colors complement color. Not used for the Salesforce app branding.

Field Name	Details
	• `MotifQuaternaryComplementColor`—Font color used with `quaternaryColor`. Label is `Quaternary motif colors complement color`. Not used for the Salesforce app branding. • `PageHeader`—An image that appears on the header of the community pages. Can be an .html, .gif, .jpg, or .png file. Label is `Page Header`. Not used for the Salesforce app branding. • `PageFooter`—An image that appears on the footer of the community pages. Must be an .html file. Label is `Page Footer`. Not used for the Salesforce app branding. • `LoginFooterText`—The text that appears in the footer of the community login page. Label is `Footer text displayed on the login page`. Not used for the Salesforce app branding. • `LoginLogoImageId`—The logo that appears on the community login page for external users. In the Salesforce app, this logo also appears on the community splash page. Label is `Logo image displayed on the login page`. • `LargeLogoImageId`—Only used for the Salesforce app. The logo that appears on the splash page when you start the Salesforce app. Label is `Large logo image`. • `SmallLogoImageId`—Only used for the Salesforce app. The logo that appears on the publisher in the Salesforce app. Label is `Small logo image`. • `StaticLogoImageURL`—The logo that appears on the community login page for external users. Label is `Static logo image url`. • `LoginQuaternaryColor`—The background color that appears on the community login page for external users. Label is `Login background color`. • `LoginRightFrameUrl`—The URL to the contents that appears on right side of the community login page for external users. Label is `Login right frame url`. • `LogoAssetId`—ID of the document, if the logo is uploaded to the Documents folder. The logo appears on the login page community login page for external users. Label is `Logo asset image`.
`AssetSourceId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the document uploaded to the Documents folder if the value of `AssetCategory` is `PageHeader`, `PageFooter`, or `LoginLogoImageId`.
`CustomBrandId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the associated CustomBrand.
`ForeignKeyAssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** This field was removed in API version 41.0, and is available in earlier versions for backward compatibility only. Use `AssetSourceId` instead. ID of the document used if the `AssetCategory` is `PageHeader`, `PageFooter`, or `LoginLogoImageId`.
`TextAsset`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Text used if the `AssetCategory` is `LoginFooterText`.

Usage

Use this object to add basic branding elements—color scheme, header or footer images, login page logo, or footer text—to the branding scheme (CustomBrand) for your Network. You must have “Create and Manage Communities” to customize community branding.

If you’re using communities in the Salesforce app, the loading page shows the logo.

SEE ALSO:

Network

CustomHttpHeader

Represents a custom HTTP header that provides context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 43.0 and later.

Supported Calls

describeLayout(), `query()`, `retrieve()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** A text description of the header field's purpose.
`HeaderFieldName`	**Type** string **Properties** Filter, Group, Sort **Description** Name of the header field. The name must contain at least one alphanumeric character or underscore. It can also include: ! # $ % & ' * + - . ^ _ ` | ~
`HeaderFieldValue`	**Type** string **Properties** Filter, Sort **Description** A formula that resolves to the value for the header. The values in the formula must evaluate to a string. If the formula resolves to null and an empty string, the header isn't sent.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the custom HTTP header is available to use.

Field Name	Details
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the entity that the custom HTTP header is related to.

Usage

For each OData external data source, define up 10 HTTP headers to request data.

Note: HTTP headers aren't supported on named credentials.

*`Custom Metadata Type`*__mdt

Represents a custom metadata record. This object is available in API version 34.0 and later.

The object name is a variable with the syntax *`Custom Metadata Type`*__mdt, where *`Custom Metadata Type`* is the `Object Name` for the custom metadata type associated with the custom metadata record. For example, `PicklistUsage__mdt` represents a custom metadata record based on the `PicklistUsage` custom metadata type.

Supported Calls

`describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`

Fields

Field	Details
`Custom Field__c`	**Type** Any Type **Properties** Filter, Group, Nillable, Sort **Description** A custom field on the record.
`DeveloperName`	**Type** string **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`isProtected`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** When a custom metadata type's records are released in a managed package, access to them is limited in specific ways. • Code that's in the same managed package as custom metadata records can read the records. • Code that's in the same managed package as custom metadata types can read the records that belong to that type. • Code that's in a managed package that doesn't contain either the type or the protected record can't read the protected records. • Code that the subscriber creates and code that's in an unmanaged package can't read the protected records. • The developer can modify protected records only with a package upgrade. The subscriber can't read or modify protected records. The developer name of a protected record can't be changed after release. Records that are hidden by these access rules are also unavailable to REST, SOAP, SOQL, and Setup.
`Label`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The custom metadata record label. This label value is always the same as the `MasterLabel` value.
`Language`	**Type** string **Properties** Filter, Group, restrictedPicklist, Sort

Field	Details
	Description The language of the custom metadata record. This value is always the default language of the developing organization.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The master label for the custom metadata record.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.
`QualifiedApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A concatenation of the namespace prefix and developer name. The format is *`NamespacePrefix__DeveloperName`*.

*`Custom Object`*__Feed

*`Custom Object`*__Feed is the base object for all record feed objects. For example, AccountFeed is based on *`Custom Object`*__Feed. The *`Custom Object`*__Feed object is not, in itself, accessible. Objects based on the *`Custom Object`*__Feed object are available in API version 18.0 and later.

Here is a table with links to Custom Object Feed types

Custom Feed Type	Custom Feed Type	Custom Feed Type	Custom Feed Type
AccountFeed	Article Type__Feed	AssetFeed	CampaignFeed
CaseFeed	CollaborationGroupFeed	ContactFeed	ContentDocumentFeed
ContractFeed	DashboardComponentFeed	DashboardFeed	EntitlementFeed

Custom Feed Type	Custom Feed Type	Custom Feed Type	Custom Feed Type
EventFeed	GoalFeed	LeadFeed	LinkedArticleFeed
MetricFeed	NewsFeed	OpportunityFeed	—
OrderFeed	OrderItemFeed	Product2Feed	ProductRequestFeed
ProductTransferFeed	ProfileSkillEndorsementFeed	ProfileSkillFeed	ProfileSkillUserFeed
QuoteFeed	ReportFeed	ResourceAbsenceFeed	ServiceAppointmentFeed
ServiceContractFeed	ServiceResourceCapacityFeed	ServiceResourceFeed	ServiceResourceSkillFeed
ServiceResourceSkillFeed	ServiceTerritoryFeed	ServiceTerritoryMemberFeed	SkillRequirementFeed
SolutionFeed	TaskFeed	TopicFeed	UserFeed
UserProfileFeed	WorkCoachingFeed	WorkFeedbackRequestFeed	WorkGoalFeed
WorkOrderFeed	WorkOrderLineItemFeed	WorkPerformanceCycleFeed	WorkTypeFeed

A custom object feed shows posts and comments about the object as well as recent changes to the object's tracked fields. Feeds offer a useful way to stay up-to-date with changes made to a custom object. The object name is variable and uses a *`Custom Object`*__Feed syntax, where *`Custom Object`* is the `Object Name` for the custom object. For example, `Article Type__Feed` represents a feed object for the custom object named Article Type.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Usage

Use this object to track changes for a custom object. A record of this object type is automatically created when a user enables feed tracking for a custom object.

CustomPermission

Represents a permission created to control access to a custom process or app, such as sending email. This object is available in API version 31.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** A description of the custom permission. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the custom permission in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to **Name** in the user interface. Limit: 80 characters. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the custom permission. Valid values are: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de`

Field Name	Details
	• Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th`
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The custom permission label, which corresponds to **Label** in the user interface. Limit: 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Usage

Use the CustomPermission object to determine users' access to custom permissions.

For example, to query all permission sets where the Button1 permission is enabled:

```
SELECT Id, DeveloperName,
(select Id, Parent.Name, Parent.Profile.Name from SetupEntityAccessItems)
FROM CustomPermission
WHERE DeveloperName = 'Button1'
```

To query all permission sets and profiles with custom permissions:

```
SELECT Assignee.Name, PermissionSet.Id,
PermissionSet.Profile.Name,
PermissionSet.isOwnedByProfile,
PermissionSet.Label
FROM PermissionSetAssignment
WHERE PermissionSetId
IN (SELECT ParentId
   FROM SetupEntityAccess
   WHERE SetupEntityType =
'CustomPermission')
```

To query for all SetupEntityAccess rows with custom permissions:

```
SELECT Id,ParentId,Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE SetupEntityType='CustomPermission'
AND ParentId
IN (SELECT Id
   FROM PermissionSet
   WHERE isOwnedByProfile = false)
```

SEE ALSO:

CustomPermissionDependency
PermissionSet
Profile
SetupEntityAccess

CustomPermissionDependency

Represents the dependency between two custom permissions when one custom permission requires that you enable another custom permission. This object is available in API version 32.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
CustomPermissionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the custom permission that requires the permission that's specified in RequiredCustomPermissionId.
RequiredCustomPermissionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the custom permission that must be enabled when CustomPermissionId is enabled.

Usage

The following Apex class contains a method that returns the IDs of all custom permissions that are required for the given custom permission ID. To use this class, save it in your organization.

```
public class CustomPermissionUtil {
   public String[] getAllRequiredCustomPermissions(String customPermId) {
      return getAllRequiredHelper(new String[]{customPermId});
   }

   private String[] getAllRequiredHelper(String[] customPermIds) {
      CustomPermissionDependency[] requiredPerms = [SELECT RequiredCustomPermissionId
                                                    FROM CustomPermissionDependency
                                                    WHERE CustomPermissionId
                                                    IN :customPermIds];
      String[] requiredPermIds = new String[]{};
      for (CustomPermissionDependency cpd : requiredPerms) {
         requiredPermIds.add(cpd.RequiredCustomPermissionId);
      }
      if (requiredPermIds.size() > 0) {
         customPermIds.addall(getAllRequiredHelper(requiredPermIds));
         return customPermIds;
      } else {
         return customPermIds;
      }
   }
}
```

For more information about using Apex classes, see the *Lightning Platform Apex Code Developer's Guide*.

SEE ALSO:

CustomPermission

DandBCompany

Represents a Dun & Bradstreet® company record, which is associated with an account added from Data.com. This object is available in API version 25.0 and later.

Warning: You can update fields in the DandBCompany object; however, field changes may be overwritten by Data.com Clean jobs or by using the Data.com Clean button.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Only organizations with Data.com Premium Prospector or Data.com Premium Clean can access this object.

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where a company is physically located. Maximum size is 40 characters.
`CompanyCurrencyIsoCode`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The code used to represent a company's local currency. This data is provided by the International Organization for Standardization (ISO) and is based on their three-letter currency codes. For example, USD is the ISO code for United States Dollar. Maximum size is 3 characters.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where a company is physically located. Maximum size is 40 characters.
`CountryAccessCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The required code for international calls. Maximum size is 4 characters.
`CurrencyCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency in which the company's sales volume is expressed. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 4 characters.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A brief description of the company, which may include information about its history, its products and services, and its influence on a particular industry. Maximum size is 32000 characters.
`DomesticUltimateBusinessName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure. Maximum size is 255 characters.
`DomesticUltimateDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number for the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure. Maximum size is 9 characters.
`DunsNumber`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking. Maximum size is 9 characters.
`EmployeeQuantityGrowthRate`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
`EmployeesHere`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of employees at a specified location, such as a branch location. Maximum size is 15 characters.

Field Name	Details
EmployeesHereReliability	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `EmployeesHere` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records)
EmployeesTotal	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total number of employees in the company, including all subsidiary and branch locations. This data is only available on records that have a value of *`Headquarters/Parent`* in the `LocationStatus` field. Maximum size is 15 characters.
EmployeesTotalReliability	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `EmployeesTotal` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records) A blank value indicates this data is unavailable.
FamilyMembers	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of family members, worldwide, within an organization, including the Global Ultimate, its subsidiaries (if any), and its branches (if any). Maximum size is 5 characters.

Field Name	Details
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company's facsimile number.
`FifthNaics`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
`FifthNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
`FifthSic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`FifthSic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`FifthSic8Desc`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FifthSicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FipsMsaCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Federal Information Processing Standards (FIPS) and the Metropolitan Statistical Area (MSA) codes identify the organization’s location. The MSA codes are defined by the US Office of Management and Budget. Maximum size is 5 characters.
`FipsMsaDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization’s FIPS MSA code. Maximum size is 255 characters.
`FortuneRank`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The numeric value of the company’s Fortune 1000 ranking. A null or blank value means that the company isn’t ranked as a Fortune 1000 company.
`FourthNaics`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
`FourthNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
`FourthSic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`FourthSic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
`FourthSic8Desc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FourthSicDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`GeoCodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Available values include: • A – *`Non-US rooftop accuracy`* • B – *`Block level`* • C – *`Places the address in the correct city`* • D – *`Rooftop level`* • I – *`Street intersection`* • M – *`Mailing address level`* • N – *`Not matched`* • P – *`PO BOX location`* • S – *`Street level`* • T – *`Census tract level`* • Z – *`ZIP code level`* • 0 (zero)– *`Geocode could not be assigned`*
`GlobalUltimateBusinessName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 255 characters.
`GlobalUltimateDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number of the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 9 characters.

Field Name	Details
`GlobalUltimateTotalEmployees`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total number of employees at the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries. Maximum size is 15 characters.
`ImportExportAgent`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies whether a business imports goods or services, exports goods or services, and/or is an agent for goods. Available values include: • A—Importer/exporter/agent • B—Importer/exporter • C—Importer • D—Importer/agent • E—Exporter/agent • F—Agent (keeps no inventory and does not take title goods) • G—None or data not available • H—Exporter
`IncludedInSnP500`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
`Latitude`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used with longitude to specify a precise location, which is then used to assess the Geocode Accuracy. Maximum size is 11 characters.

Field Name	Details
LegalStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies the legal structure of an organization.
LocationStatus	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Identifies the organizational status of a company. Available values are *Single location*, *Headquarters/Parent*, and *Branch*. Available values include: • 0—Single location (no other entities report to the business) • 1—Headquarters/parent (branches and/or subsidiaries report to the business) • 2—Branch (secondary location to a headquarters location)
Longitude	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used with latitude to specify a precise location, which is then used to assess the Geocode Accuracy. Maximum size is 11 characters.
MailingAddress	**Type** address **Properties** Filter, Nillable **Description** The compound form of the mailing address. Read-only. See Address Compound Fields for details on compound address fields.
MailingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where a company has its mail delivered. Maximum size is 40 characters.

Field Name	Details
MailingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country where a company has its mail delivered. Maximum size is 40 characters.
MailingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code that a company uses on its mailing address. Maximum size is 20 characters.
MailingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where a company has its mail delivered. Maximum size is 20 characters.
MailingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where a company has its mail delivered. Maximum size is 255 characters.
MarketingPreScreen	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The probability that a company will pay with a significant delay compared to the agreed terms. The risk level is based on the standard Commercial Credit Score, and ranges from low risk to high risk. Available values include: • L—*Low risk of delinquency* • M—*Moderate risk of delinquency* • H—*High risk of delinquency*

Field Name	Details
	Important: Use this information for marketing pre-screening purposes only.
MarketingSegmentationCluster	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Twenty-two distinct, mutually exclusive profiles, created as a result of cluster analysis of Dun & Bradstreet data for US organizations.
MinorityOwned	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether an organization is owned or controlled by a member of a minority group. Available values include: • Y—Minority owned • N—Not minority owned
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The primary or registered name of a company. Maximum size is 255 characters.
NationalId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identification number used in some countries for business registration and tax collection. Maximum size is 255 characters.
NationalIdType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description A code value that identifies the type of national identification number used. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 5 characters.
`OutOfBusiness`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether the company at the specified address has discontinued operations. Available values include: • Y—Out of business • N—Not out of business
`OwnOrRent`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether a company owns or rents the building it occupies. Available values include: • 0—Unknown or not applicable • 1—Owns • 2—Rents
`ParentOrHqBusinessName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The primary name of the parent or headquarters company. Maximum size is 255 characters.
`ParentOrHqDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The D-U-N-S Number for the parent or headquarters. Maximum size is 9 characters.

Field Name	Details
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A company's primary telephone number.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code that corresponds to a company's physical location. Maximum size is 20 characters.
PremisesMeasure	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.
PremisesMeasureUnit	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PrimaryNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 6 characters.
`PrimaryNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on its NAICS code. Maximum size is 120 characters.
`PrimarySic`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The four-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 4 characters.
`PrimarySic8`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The eight-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 8 characters.
`PrimarySic8Desc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on its SIC code. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 80 characters.
PrimarySicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on its SIC code. Maximum size is 80 characters.
PriorYearEmployees	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The annual revenue for the prior year.
PublicIndicator	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether ownership of the company is public or private. Available values include: • Y—Public • N—Private
SalesTurnoverGrowthRate	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.
`SalesVolume`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The total annual sales revenue in the headquarters' local currency. Dun & Bradstreet tracks revenue data for publicly traded companies, Global Ultimates, Domestic Ultimates, and some headquarters.
`SalesVolumeReliability`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The reliability of the `SalesVolume` figure. Available values include: • 0—Actual number • 1—Low • 2—Estimated (for all records) • 3—Modeled (for non-US records)
`SecondNaics`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
`SecondNaicsDesc`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
`SecondSic`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SecondSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SecondSic8Desc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SecondSicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SixthNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
SixthNaicsDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
SixthSic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SixthSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SixthSic8Desc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SixthSicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SmallBusiness	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Indicates whether the company is designated a small business as defined by the Small Business Administration of the US government. Available values include: • Y—Small business site • N—Not small business site
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where a company is physically located. Maximum size is 20 characters.
`StockExchange`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The corresponding exchange for a company's stock symbol. For example: NASDAQ or NYSE. Maximum size is 16 characters.
`StockSymbol`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The abbreviation used to identify publicly traded shares of a particular stock. Maximum size is 6 characters.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where a company is physically located. Maximum size is 255 characters.
`Subsidiary`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description Indicates whether a company is more than 50 percent owned by another organization. Available values include: • 0—Not subsidiary of another organization • 3—Subsidiary of another organization
ThirdNaics	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional NAICS code used to further classify an organization by industry. Maximum size is 6 characters.
ThirdNaicsDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding NAICS code. Maximum size is 120 characters.
ThirdSic	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
ThirdSic8	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
ThirdSic8Desc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
ThirdSicDesc	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
TradeStyle1	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name, different from its legal name, that an organization may use for conducting business. Similar to "Doing business as" or "DBA". Maximum size is 255 characters.
TradeStyle2	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
TradeStyle3	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
TradeStyle4	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.

Field Name	Details
TradeStyle5	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An additional tradestyle used by the organization. Maximum size is 255 characters.
URL	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An organization's primary website address. Maximum size is 104 characters.
UsTaxId	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The identification number for the company used by the Internal Revenue Service (IRS) in the administration of tax laws. Also referred to as Federal Taxpayer Identification Number. Maximum size is 9 characters.
WomenOwned	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether a company is more than 50 percent owned or controlled by a woman. Available values include: • Y—Owned by a woman • N—Not owned by a woman, or unknown
YearStarted	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The year the company was established or the year when current ownership or management assumed control of the company. Maximum size is 4 characters.

Usage

Use this object to manage D&B Company records in your organization.

Dashboard

Represents a dashboard, which shows data from custom reports as visual components. Access is read-only. This object is available in API version 20.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Fields

Field	Details
`BackgroundDirection`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Returns the direction of the background fade. Available values are: • `Top to Bottom` • `Left to Right` • `Diagonal` (default value) Label is `Background Fade Direction`.
`BackgroundEnd`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the ending fade color in hexadecimal. Label is `Ending Color`.
`BackgroundStart`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the starting fade color in hexadecimal. Label is `Starting Color`.

Field	Details
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Returns the description of the dashboard. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is `Dashboard Unique Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FolderId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. Returns the ID of the Folder that contains the dashboard. See Folder.
`FolderName`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the dashboard. Available in API version 35.0 and later.
`IsDeleted`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LeftSize`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Returns the size of the left column of the dashboard. Available values are: • `Narrow` • `Medium` • `Wide`
`MiddleSize`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Returns the size of the middle column of the dashboard. Available values are:

Field	Details
	• `Narrow` • `Medium` • `Wide`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`RightSize`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Returns the size of the right column in the dashboard. Available values are: • `Narrow` • `Medium` • `Wide`
`RunningUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** Returns the ID of the running user specified for the dashboard.

Field	Details
	If the dashboard was created in Lightning Experience and is configured to run as the viewing user, returns the user ID of the dashboard creator. If the dashboard was created in Salesforce Classic and is configured to run as the logged-in user, returns the user ID of the last specified running user.
`TextColor`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the body text color in hexadecimal. Label is `Text Color`.
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** Returns the title of the dashboard. Limit: 80 characters.
`TitleColor`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the title text color in hexadecimal. Label is `Title Color`.
`TitleSize`	**Type** int **Properties** Filter, Group, Sort **Description** Returns the title font size in points. Label is `Title Size`.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Returns the dashboard type. Available values are: • `SpecificUser`—The dashboard displays data according to the access level of one specific running user.

Field	Details
	• `LoggedInUser`—The dashboard displays data according to the access level of the logged-in user. • `MyTeamUser`—The dashboard displays data according to the access level of the logged-in user, and managers can view dashboards from the point of view of users beneath them in the role hierarchy.

Supported Query Scopes

Use these scopes to help specify the data that your SOQL query returns.

allPrivate

Records saved in all users' private folders.

Requires the user permission "Manage All Private Reports and Dashboards" and Enhanced Analytics Folder Sharing. If your organziation was created after the Summer '13 release, you already have Enhanced Analytics Folder Sharing. Available in API version 36.0 and later.

created

Records created by the user running the query.

everything

All records except records saved in other users' private folders.

mine

Records saved in the private folder of the user running the query.

Usage

Provides read only access to the current values in the dashboard fields.

Example: Dashboards in an Inactive User's Private Folder

This SOQL query returns dashboards saved in a specific user's private folder.

```
SELECT Id FROM Dashboard USING SCOPE allPrivate WHERE CreatedByID = '005A0000000Bc2deFG'
```

SEE ALSO:

DashboardFeed

DashboardTag

Report

DashboardComponent

Represents a dashboard component, which can be a chart, metric, table, or gauge on a dashboard. Access is read-only. This object is available in API version 21.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CustomReportId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Requires the user permission "Manage All Private Reports and Dashboards." The ID of the report that provides data for the dashboard component. See Report.
`DashboardId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the dashboard that contains the dashboard component. See Dashboard.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the dashboard component.

Usage

Provides read only access to the current values in dashboard component fields.

DashboardComponentFeed

Represents a single feed item in the feed displayed on a dashboard component. This object is available in API version 21.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of DashboardComponentFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Create, Nillable, Sort

Field	Details
	Description This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Create, Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDate DESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>`

Field	Details
	• `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, LastModifiedDate is the same as CreatedDate. If a FeedComment is inserted on that feed item, then LastModifiedDate becomes the CreatedDate for that FeedComment. Deleting the FeedComment does not change the LastModifiedDate. Ordering by LastModifiedDate DESC sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Create, Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the dashboard that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `Type ContentPost`.
`Title`	**Type** string **Properties** Create, Group, Nillable, Sort, Update

Field	Details
	Description The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type` `QuestionPost`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of FeedItem. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create FeedItem types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed.

Field	Details
	• `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to retrieve the current contents of the feed fields, such as type of feed or feed ID.

DashboardFeed

Represents a single feed item in the feed displayed on a dashboard. This object is available in API version 20.0 and later.

Shows changes to dashboard fields tracked in feeds, and posts and comments about the dashboard.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

> Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of DashboardFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your

Field	Details
	comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.

Field	Details
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
FeedPostId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.

Field	Details
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the dashboard that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval.

Field	Details
	• `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization.

Field	Details
	`Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to retrieve the current contents of the feed fields, such as type of feed or feed ID.

SEE ALSO:

Dashboard

DashboardTag

Associates a word or short phrase with a Dashboard. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string

Field Name	Details
	Properties Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

DashboardTag stores the relationship between its parent TagDefinition and the Dashboard being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SEE ALSO:

Dashboard

DataAssessmentFieldMetric

Represents summary statistics for matched, blank, and differing fields in account records of an org compared to records in Data.com.This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Child Relationships

DataAssessmentFieldMetric is a child object of DataAssessmentMetric object.

Fields

Field Name	Details
DataAssessmentMetricId	**Type** reference **Properties** Filter, Group, Sort **Description** A unique number that identifies the parent DataAssessmentMetric record.
FieldName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the assessed field.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
NumMatchedBlanks	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records that contain blank fields.
NumMatchedDifferent	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The number of matched records that have a different value for this field.
`NumMatchedInSync`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records that have the same value for this field.
`NumUnmatchedBlanks`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of unmatched records that contain blank fields.

DataAssessmentMetric

Represents a summary of statistics for fields matched and unmatched in your account records with Data.com account records.This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
`NumDuplicates`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of duplicate records.
NumMatched	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of matched records.
NumMatchedDifferent	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records in your org matched with a Data.com record that have different fields.
NumProcessed	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records processed in the data assessment.
NumTotal	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records available for data assessment processing.
NumUnmatched	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of records not matched.

DataAssessmentValueMetric

Summarizes the number of fields matched for your account records with Data.com account records.This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Child Relationships

DataAssessmentValueMetric is a child of DataAssessementFieldMetric.

Fields

Field Name	Details
`DataAssessmentFieldMetricId`	**Type** reference **Properties** Filter, Group, Sort **Description** A unique number that identifies the parent DataAssessementFieldMetric record.
`FieldValue`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The value in the matched field.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
`ValueCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times this value appears in this field.

DatacloudCompany

Represents the fields for Data.com company records. This object is available in API version 30.0 or later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`

Fields

Field Name	Details
`ActiveContacts`	**Type** int **Properties** Nillable **Description** The number of active contacts that are associated with a company.
`AnnualRevenue`	**Type** currency **Properties** Filter, Nillable **Description** The amount of money that the company makes in 1 year. Annual revenue is measured in US dollars.
`City`	**Type** string **Properties** Filter, Nillable, Sort **Description** The name of the city where the company is located.
`CompanyId`	**Type** string **Properties** Filter, Nillable **Description** A unique numerical identifier for the company and theData.com identifier for a company.

Field Name	Details
Country	**Type** string **Properties** Filter, Nillable, Sort **Description** A string that represents the standard abbreviation for the country where the company is located.
CountryCode	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A standardized name for countries of the world.
Description	**Type** string **Properties** Nillable **Description** A brief synopsis of the company that provides a general overview of the company and what it does.
DunsNumber	**Type** string **Properties** Filter, Nillable **Description** A randomly generated nine-digit number that's assigned by Dun & Bradstreet (D&B) to identify unique business establishments.
EmployeeQuantityGrowthRate	**Type** double **Properties** Nillable **Description** The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.

Field Name	Details
ExternalId	**Type** string **Properties** Filter, Nillable, Sort **Description** A unique numerical identifier for the company. The `ExternalId` is a system-generated number.
Fax	**Type** phone **Properties** Nillable **Description** The telephone number that's used to send and receive faxes.
FortuneRank	**Type** int **Properties** Defaulted on create, Group, Nillable **Description** The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
FullAddress	**Type** string **Properties** Group, Nillable **Description** The complete address of a company, including Street, City, State, and Zip.
IncludedInSnP500	**Type** string **Properties** Group, Nillable **Description** A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
Industry	**Type** string

Field Name	Details
	Properties Nillable **Description** A description of the type of industry such as Telecommunications, Agriculture, or Electronics.
IsInCrm	**Type** boolean **Properties** Defaulted on create, Group **Description** Whether the record is in Salesforce (true) or not (false).
IsInactive	**Type** boolean **Properties** Defaulted on create, Filter **Description** A true or false response. True, the company record is not active. False, the company record is active.
IsOwned	**Type** boolean **Properties** Defaulted on create **Description** A true or false value. True, your organization owns the record. False, your organization doesn’t own the record.
NaicsCode	**Type** string **Properties** Filter, Nillable **Description** A value that represents the North American Industry Classification System (NAICS) code. NAICS was created to provide details about a business’s service orientation. The code descriptions are focused on what a business does.
NaicsDesc	**Type** string

Field Name	Details
	Properties Nillable **Description** A description of the NAICS classification.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The company's name.
`NumberOfEmployees`	**Type** int **Properties** Filter, Nillable **Description** The number of employees working for the company.
`Ownership`	**Type** string **Properties** Filter, Nillable **Description** The type of ownership of the company: • `Public` • `Private` • `Government` • `Other`
`Phone`	**Type** phone **Properties** Nillable **Description** A numeric string containing the primary telephone number for the company.
`PremisesMeasure`	**Type** int

Field Name	Details
	Properties Group, Nillable **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Group, Nillable **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.
PremisesMeasureUnit	**Type** string **Properties** Group, Nillable **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PriorYearEmployees	**Type** int **Properties** Group, Nillable **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Nillable **Description** The annual revenue for the prior year.
SalesTurnoverGrowthRate	**Type** double **Properties** Nillable **Description** The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.

Field Name	Details
Sic	**Type** string **Properties** Filter, Nillable **Description** A numeric value that represents the Standard Industrial Codes (SIC). SIC is a numbering convention that indicates what type of service a business provides. It is a four-digit value.
SicCodeDesc	**Type** string **Properties** Group, Nillable **Description** The SIC numeric code and descsciption for a company.
SicDesc	**Type** string **Properties** Nillable **Description** A description of the SIC classification.
Site	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** An organizational status of the company. • Branch: a secondary location to a headquarter location • Headquarter: a parent company with branches or subsidiaries • Single Location: a single business with no subsidiaries or branches
State	**Type** string **Properties** Filter, Nillable, Sort **Description** The two-letter standard abbreviation for a state.

Field Name	Details
StateCode	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A standard two-letter abbreviation for states and territories of the United States. The state where the company is located. The abbreviation can also be a province or other equivalent to a state, depending on the country where the company is located.
Street	**Type** string **Properties** Nillable **Description** A postal address for the company.
TickerSymbol	**Type** string **Properties** Nillable **Description** The symbol that uniquely identifies companies that are traded on public stock exchanges.
TradeStyle	**Type** string **Properties** Nillable **Description** A legal name under which a company conducts business.
UpdatedDate	**Type** dateTime **Properties** Nillable, Sort **Description** The last date and time when the information for this company was updated.

Field Name	Details
`Website`	**Type** url **Properties** Nillable **Description** The standard URL for the company's home page.
`YearStarted`	**Type** string **Properties** Nillable **Description** The year when the company was founded.
`Zip`	**Type** string **Properties** Filter, Nillable **Description** A numeric postal code that's designated for the address.

Usage

Use the DatacloudCompany object to search the Data.com database for companies with the specific criteria that you enter. Use this object to find company records that you are interested in purchasing for your organization. Data.com APIs use the term "company," which is similar to Salesforce term "accounts."

Important: DatacloudCompany can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudContact

The fields and properties for Data.com contact records. This object is available in API version 30.0 or later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`City`	**Type** string **Properties** Filter, Nillable, Sort **Description** The city where the company is located.
`CompanyId`	**Type** string **Properties** Filter, Nillable **Description** The unique numerical identifier for the company and the Data.com company identification number or Data.com Key.
`CompanyName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the company.
`ContactId`	**Type** string **Properties** Filter, Nillable **Description** The unique numeric identifier for this contact.
`Country`	**Type** string **Properties** Filter, Nillable, Sort **Description** The standard abbreviation or name for the country where the company is located. Note: You can enter a comma-separated list of countries; however, for a country that uses a comma in its name, leave out the comma. For example, enter "Taiwan, ROC" as `Taiwan ROC`.

Field Name	Details
`Department`	**Type** picklist **Properties** Filter, Group, Restricted picklist **Description** The department in the company that the contact is affiliated with. The values of this field are fixed enumerated values. • `Engineering` • `Finance` • `Human Resources` • `IT` • `Marketing` • `Operations` • `Other` • `Sales` • `Support`
`Email`	**Type** email **Properties** Filter, Nillable **Description** A business email address for the contact.
`ExternalId`	**Type** string **Properties** Filter, Nillable, Sort **Description** A unique system-generated numerical identifier for the contact.
`FirstName`	**Type** string **Properties** Filter, Nillable **Description** The first name of the contact.

Field Name	Details
IsInCrm	**Type** boolean **Properties** Defaulted on create, Group **Description** Whether the record is in Salesforce (true) or not (false).
IsInactive	**Type** boolean **Properties** Defaulted on create, Filter **Description** Whether the record is active (false) or not (true).
IsOwned	**Type** boolean **Properties** Defaulted on create **Description** • `True`: You own this record. • `False`: You do not own this record.
LastName	**Type** string **Properties** Filter, Nillable, Sort **Description** The last name of the contact.
Level	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist **Description** A human resource label that designates a person's level in the company. The values of this field are fixed enumerated values. • `C-Level` • `VP` • `Director` • `Manager`

Field Name	Details
	• `Staff` • `Other`
`Phone`	**Type** phone **Properties** Nillable **Description** The direct-dial telephone number for the contact.
`SocialHandles`	**Type** string **Properties** The social handles for this contact. Social handles are a normalized URL and user name for social media accounts such as, LinkedIn, Facebook, and Twitter. This field is response-only. The DatacloudSocialHandles object is a child of the DatacloudContact object.
`State`	**Type** string **Properties** Filter, Nillable, Sort **Description** The state where the company is located, which can also be a province or other equivalent to a state, depending on the country where the company is located.
`Street`	**Type** string **Properties** Nillable **Description** The street address for the company where the contact works.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Title of the contact such as CEO or Vice President.

Field Name	Details
UpdatedDate	**Type** dateTime **Properties** Nillable, Sort **Description** The last date and time when the information for a contact was updated.
Zip	**Type** string **Properties** Filter, Nillable **Description** The postal or zip code for the address.

Usage

This object searches the Data.com database for contacts with the specific criteria that you enter. Use this object to find contact records that you are interested in purchasing for your organization.

Important: DatacloudContact can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudDandBCompany

Represents a set of read-only fields that are used to return D&B company data from Data.com API calls. This object is available in API version 30.0 or later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
City	**Type** string **Properties** Nillable

Field Name	Details
	Description The name of the city where the company is physically located.
CompanyCurrencyIsoCode	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The code used to represent a company's local currency. This data is provided by the International Organization for Standardization (ISO) and is based on their three-letter currency codes. For example, USD is the ISO code for United States Dollar.
CompanyId	**Type** string **Properties** Filter, Nillable, Sort **Description** A unique numeric identifier for a company.
Country	**Type** string **Properties** Nillable **Description** The country where a company is physically located.
CountryAccessCode	**Type** string **Properties** Nillable **Description** The required code for international calls.
CurrencyCode	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The currency in which the company's sales volume is expressed.

Field Name	Details
Description	**Type** string **Properties** Nillable **Description** A brief description of the company, which may include information about its history, its products and services, and its influence on a particular industry.
DomesticUltimateBusinessName	**Type** string **Properties** Nillable **Description** The primary name of the Domestic Ultimate, which is the highest ranking subsidiary, specified by country, within an organization's corporate structure.
DomesticUltimateDunsNumber	**Type** string **Properties** Nillable **Description** The D-U-N-S number for the Domestic Ultimate, which is the highest-ranking subsidiary, specified by country, within an organization's corporate structure.
DunsNumber	**Type** string **Properties** Filter, Nillable **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
EmployeeQuantityGrowthRate	**Type** double **Properties** Nillable

Field Name	Details
	Description The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
`EmployeesHere`	**Type** double **Properties** Nillable **Description** The number of employees at a specified location, such as a branch location.
`EmployeesHereReliability`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the `EmployeesHere` figure. Available values are *`Actual number`*, *`Low`*, *`Estimated (for all records)`*, *`Modeled (for non-US records)`*. A blank value indicates this data is unavailable.
`EmployeesTotal`	**Type** double **Properties** Nillable **Description** The total number of employees in the company, including all subsidiary and branch locations. This data is available only on records that have a value of *`Headquarters/Parent`* in the `LocationStatus` field.
`EmployeesTotalReliability`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the `EmployeesTotal` figure. Available values are *`Actual number`*, *`Low`*, *`Estimated (for all records)`*, *`Modeled (for non-US records)`*. A blank value indicates this data is unavailable.
`ExternalId`	**Type** string

Field Name	Details
	Properties Filter, Nillable, Sort **Description** A system generated numeric identification.
`FamilyMembers`	**Type** int **Properties** Nillable **Description** The total number of family members, worldwide, within an organization, including the Global Ultimate, its subsidiaries (if any), and its branches (if any).
`Fax`	**Type** phone **Properties** Nillable **Description** The company's facsimile number.
`FifthNaics`	**Type** string **Properties** Nillable **Description** A NAICS code that's used to further classify an organization by industry.
`FifthNaicsDesc`	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding NAICS code.
`FifthSic`	**Type** string **Properties** Nillable

Field Name	Details
	Description A Standard Industrial Classification (SIC) code that's used to further classify an organization by industry.
FifthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
FifthSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
FifthSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
FipsMsaCode	**Type** string **Properties** Nillable **Description** The Federal Information Processing Standards (FIPS) and the Metropolitan Statistical Area (MSA) codes identify the organization's location. The MSA codes are defined by the US Office of Management and Budget.
FipsMsaDesc	**Type** string **Properties** Nillable

Field Name	Details
	Description A brief description of an organization's FIPS MSA code.
FortuneRank	**Type** int **Properties** Defaulted on create, Group, Nillable **Description** The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
FourthNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
FourthNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding NAICS code.
FourthSic	**Type** string **Properties** Group, Nillable **Description** A SIC code used to further classify an organization by industry.
FourthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.

Field Name	Details
`FourthSic8Desc`	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization’s line of business, based on the corresponding SIC code. Maximum size is 80 characters.
`FourthSicDesc`	**Type** string **Properties** Nillable **Description** A brief description of an organization’s line of business, based on the corresponding SIC code.
`GeoCodeAccuracy`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The level of accuracy of a location’s geographical coordinates compared with its physical address. Available values include *`Rooftop level`*, *`Street level`*, *`Block level`*, *`Census tract level`*, *`Mailing address level`*, *`ZIP code level`*, *`Geocode could not be assigned`*, *`Places the address in the correct city`*, *`Not matched`*, *`State or Province Centroid`*, *`Street intersection`*, *`PO BOX location`*, *`Non-US rooftop accuracy`*, *`County Centroid`*, *`Sub Locality-Street Level`*, and *`Locality Centroid`*
`GlobalUltimateBusinessName`	**Type** string **Properties** Nillable **Description** The primary name of the Global Ultimate, which is the highest entity within an organization’s corporate structure and may oversee branches and subsidiaries.
`GlobalUltimateDunsNumber`	**Type** string **Properties** Filter, Nillable

Field Name	Details
	Description The D-U-N-S number of the Global Ultimate, which is the highest-ranking entity within an organization's corporate structure and can oversee branches and subsidiaries.
`GlobalUltimateTotalEmployees`	**Type** double **Properties** Nillable **Description** The total number of employees at the Global Ultimate, which is the highest entity within an organization's corporate structure and may oversee branches and subsidiaries.
`ImportExportAgent`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Identifies whether a business imports goods or services, exports goods or services, and/or is an agent for goods.
`IncludedInSnP500`	**Type** string **Properties** Group, Nillable **Description** A true or false value. If `true`, the company is listed in the S&P 500 Index. If `false`, the company isn't listed in the S&P 500 Index.
`Industry`	**Type** string **Properties** Group, Nillable **Description** A description of the type of industry such as Telecommunications, Agriculture, or Electronics.
`IsOwned`	**Type** boolean

Field Name	Details
	Properties Defaulted on create **Description** A true or false value. True, your organization owns the record. False, your organization doesn't own the record.
`IsParent`	**Type** boolean **Properties** Defaulted on create, **Description** A true or false value. True, the company is a parent company. False, the company isn't a parent company. A parent company owns other companies.
`Latitude`	**Type** string **Properties** Nillable **Description** Used with longitude to specify a precise location, which is used to assess the Geocode Accuracy.
`LegalStatus`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Identifies the legal structure of an organization. Available values include *`Cooperative`*, *`Nonprofit organization`*, *`Local government body`*, *`Partnership of unknown type`*, and *`Foreign company`*.
`LocationStatus`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Identifies the organizational status of a company. A numeric value represents each value.

Field Name	Details
	<table><tr><th>Organizational status</th><th>Numeric value</th></tr><tr><td>*Single location*: The business has no branches or subsidiaries.</td><td>*0*</td></tr><tr><td>*Headquarters/Parent*: A parent company that owns more than 50 percent of another company. When the company also has branches, it's the headquarters.</td><td>*1*</td></tr><tr><td>*Branch*: A secondary location of a business.</td><td>*2*</td></tr></table> Note: Only the numeric value is accepted in an API request.
Longitude	**Type** string **Properties** Nillable **Description** Used with latitude to specify a precise location, which is used to assess the Geocode Accuracy.
MailingCity	**Type** string **Properties** Nillable **Description** The city where a company has its mail delivered.
MailingCountry	**Type** string **Properties** Nillable **Description** The country where a company has its mail delivered.
MailingState	**Type** string **Properties** Nillable

Field Name	Details
	Description The state where a company has its mail delivered.
`MailingStreet`	**Type** string **Properties** Nillable **Description** The street address where a company has its mail delivered.
`MailingZip`	**Type** string **Properties** Nillable **Description** The postal zip code for the company.
`MarketingPreScreen`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The probability that a company pays with a significant delay compared to the agreed terms. The risk level is based on the standard Commercial Credit Score, and ranges from low risk to high risk. Available values are *`High risk of delinquency`*, *`Low risk of delinquency`*, and *`Moderate risk of delinquency`*. **Important:** Use this information for marketing pre-screening purposes only.
`MarketingSegmentationCluster`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Twenty-two distinct, mutually exclusive profiles, created as a result of cluster analysis of Dun & Bradstreet data for US organizations. Available values include *`High-Tension Branches of Insurance/Utility Industries`*, *`Rapid-Growth Large Businesses`*, *`Labor-Intensive Giants`*, *`Spartans`*, *`Main Street USA`*.

Field Name	Details
MinorityOwned	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether an organization is owned or controlled by a member of a minority group.
Name	**Type** string **Properties** Filter, Nillable **Description** The primary or registered name of a company.
NationalId	**Type** string **Properties** Nillable **Description** The identification number used in some countries for business registration and tax collection.
NationalIdType	**Type** picklist **Properties** Nillable, Restricted picklist **Description** A code value that identifies the type of national identification number that's used.
OutOfBusiness	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether the company at the specified address has discontinued operations.
OwnOrRent	**Type** picklist

Field Name	Details
	Properties Nillable, Restricted picklist **Description** Indicates whether a company owns or rents the building it occupies.
ParentOrHqBusinessName	**Type** string **Properties** Nillable **Description** The primary name of the parent or headquarters company.
ParentOrHqDunsNumber	**Type** string **Properties** Filter, Nillable **Description** The D-U-N-S number for the parent or headquarters.
Phone	**Type** phone **Properties** Nillable **Description** A company's primary telephone number.
PremisesMeasure	**Type** int **Properties** Group, Nillable **Description** A numeric value for the measurement of the premises.
PremisesMeasureReliability	**Type** string **Properties** Group, Nillable **Description** A descriptive accuracy of the measurement such as actual, estimated, or modeled.

Field Name	Details
PremisesMeasureUnit	**Type** string **Properties** Group, Nillable **Description** A descriptive measurement unit such as acres, square meters, or square feet.
PrimaryNaics	**Type** string **Properties** Nillable **Description** The six-digit North American Industry Classification System (NAICS) code is the standard used by business and government to classify business establishments according to their economic activity for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.
PrimaryNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on its NAICS code.
PrimarySic	**Type** string **Properties** Nillable **Description** The four-digit SIC code that's used to categorize business establishments by industry.
PrimarySic8	**Type** string **Properties** Group, Nillable **Description** The eight-digit Standard Industrial Classification (SIC) code is used to categorize business establishments by industry. The full list of values can be found at the Optimizer Resources page maintained by Dun & Bradstreet. Maximum size is 8 characters.

Field Name	Details
PrimarySic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
PrimarySicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on its SIC code.
PriorYearEmployees	**Type** int **Properties** Group, Nillable **Description** The total number of employees for the prior year.
PriorYearRevenue	**Type** double **Properties** Nillable **Description** The annual revenue for the prior year.
PublicIndicator	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether ownership of the company is public or private.
Revenue	**Type** double **Properties** Nillable

Field Name	Details
	Description The annual revenue of a company in US dollars.
`SalesTurnoverGrowthRate`	**Type** double **Properties** Nillable **Description** The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.
`SalesVolume`	**Type** double **Properties** Nillable **Description** The total annual sales revenue in the headquarters' local currency. Dun & Bradstreet tracks revenue data for publicly traded companies, Global Ultimates, Domestic Ultimates, and some headquarters.
`SalesVolumeReliability`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The reliability of the `SalesVolume` figure.
`SecondNaics`	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
`SecondNaicsDesc`	**Type** string **Properties** Nillable

Field Name	Details
	Description A brief description of an organization's line of business, based on the corresponding NAICS code.
SecondSic	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.
SecondSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SecondSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SecondSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
SixthNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.

Field Name	Details
SixthNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
SixthSic	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.
SixthSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
SixthSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.
SixthSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code.
SmallBusiness	**Type** picklist

Field Name	Details
	Properties Nillable, Restricted picklist **Description** Indicates whether the company is designated a small business as defined by the Small Business Administration of the US government.
State	**Type** string **Properties** Nillable **Description** The state where a company is physically located.
StockExchange	**Type** string **Properties** Nillable **Description** The corresponding exchange for a company's stock symbol, for example, NASDAQ or NYSE.
StockSymbol	**Type** string **Properties** Nillable **Description** The abbreviation that's used to identify publicly traded shares of a particular stock.
Street	**Type** string **Properties** Nillable **Description** The street address where a company is physically located.
Subsidiary	**Type** picklist **Properties** Nillable, Restricted picklist

Field Name	Details
	Description Indicates whether a company is more than 50 percent owned by another organization.
ThirdNaics	**Type** string **Properties** Nillable **Description** A NAICS code used to further classify an organization by industry.
ThirdNaicsDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization's line of business, based on the corresponding NAICS code.
ThirdSic	**Type** string **Properties** Nillable **Description** A SIC code used to further classify an organization by industry.
ThirdSic8	**Type** string **Properties** Group, Nillable **Description** An additional SIC code used to further classify an organization by industry. Maximum size is 8 characters.
ThirdSic8Desc	**Type** string **Properties** Group, Nillable **Description** A brief description of an organization's line of business, based on the corresponding SIC code. Maximum size is 80 characters.

Field Name	Details
ThirdSicDesc	**Type** string **Properties** Nillable **Description** A brief description of an organization’s line of business, based on the corresponding SIC code.
TradeStyle1	**Type** string **Properties** Nillable **Description** A name, different from its legal name, that an organization may use for conducting business. Similar to “Doing business as” or “DBA”.
TradeStyle2	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle3	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle4	**Type** string **Properties** Nillable **Description** A tradestyle used by the organization.
TradeStyle5	**Type** string

Field Name	Details
	Properties Nillable **Description** A tradestyle used by the organization.
UsTaxId	**Type** string **Properties** Nillable **Description** The identification number for the company used by the Internal Revenue Service (IRS) in the administration of tax laws. Also referred to as Federal Taxpayer Identification Number.
Website	**Type** url **Properties** Filter, Group, Nillable **Description** An organization’s primary website address.
WomenOwned	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Indicates whether a company is more than 50 percent owned or controlled by a woman.
YearStarted	**Type** string **Properties** Nillable **Description** The year when the company was established or the year when current ownership or management assumed control of the company.
Zip	**Type** string

Field Name	Details
	Properties Nillable **Description** A five or nine-digit code that's used to help sort mail.

Usage

Use this object to return D&B Company information. These fields are read-only.

Important: DatacloudDandBCompany can't be used in Apex test methods, because an external web service call is required to access it. These calls are not allowed in Apex test methods.

DatacloudOwnedEntity

Represents fields in the DatacloudOwnedEntity object. The DatacloudOwnedEntity object tracks user-purchased records. This object is available in API version 30.0 or later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DataDotComKey`	**Type** string **Properties** Create, Filter, Sort **Description** The Data.com contact or company record identification number used by the DatacloudPurchaseUsage object to keep track of purchased records. This is equivalent to the Data.com record ID for a contact or company.
`DatacloudEntityType`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Sort **Description** The type of Data.com record you want to purchase.

Field Name	Details
	• 0—contact • 1—company
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
PurchaseType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A read only field set by the API to identify the purchase type. • Added • Export • API
PurchaseUsageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The unique identification number for the DatacloudPurchaseUsage object created by making a REST POST request. • 0—contact • 1—company
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** A unique identifier for the user making the purchase.

Usage

The Datacloud object that tracks records that are purchased and owned by a specific user.

DatacloudPurchaseUsage

Represents an object used to identify and track Data.com record purchases. This object is available in API version 30.0 or later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DatacloudEntityType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of Data.com record you want to purchase. • 0—indicates contact entity type. • 1—indicates company entity type.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** An optional field. You can add a description for your purchase.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An optional field used to name your record.
`PurchaseType`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** A read only field set by the API to identify the purchase type. • Added • Export • API
`Usage`	**Type** double **Properties** Filter, Sort **Description** A read only field set by the API. It is used to track the points used to purchase records.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** A read only field set by the API that identifies the user purchasing the records.
`UserType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A read only field set by the API with 2 user types. • Monthly Usage • List Pool User

Usage

The DatacloudPurchaseUsage object allows you to track Data.com record purchases for CRM users.

DatacloudSocialHandle

Returns normalized URLs with userids for different social media used by Data.com contacts. The DatacloudSocialHandle object is a child object of the DatacloudContact object.This object is available in API version 30.0 or later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`DatacloudContactId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The unique numeric identifier for a Data.com contact record.
`ProviderName`	**Type** string **Properties** Filter, Nillable, Sort **Description** The name of the social media provider.
`SocialId`	**Type** string **Properties** Filter, Nillable, Sort **Description** The normalized userid for the user on this social media.
`Url`	**Type** url **Properties** Filter, Nillable, Sort **Description** A normalized URL and userid for the website of the social media provider.

Usage

Returns social handles with Data.com contacts from the DatacloudContact object. Social handle fields are read only fields and can't be used to filter results.

DataIntegrationRecordPurchasePermission

Indicates Lightning Data purchase credits that a Salesforce admin has granted to users.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`ExternalObject`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the name of the data service record matched to the Salesforce record.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Indicates the ID of a user to whom purchase credits are assigned.
`UserRecordPurchaseLimit`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the number of purchase credits assigned to a user.

DatedConversionRate

Represents the dated exchange rates used by an organization for which the multicurrency and the effective dated currency features are enabled.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`,

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ConversionRate`	**Type** double **Properties** Filter, Update **Description** Required. Conversion rate of this currency type against the corporate currency.
`IsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Required. ISO code of the currency. Must be one of the valid alphabetic, three-letter currency ISO codes defined by the ISO 4217 standard, such as `USD`, `GBP`, or `JPY`. Must be unique within your organization. Label is **Currency ISO Code**.
`NextStartDate`	**Type** date **Properties** Filter, Nillable **Description** Read only. The date on which the next effective dated exchange rate will start. Effectively the day after the end date for this exchange rate.
`StartDate`	**Type** date

Field	Details
	Properties Filter **Description** The date on which the effective dated exchange rate starts.

Usage

This object is for multicurrency organizations with advanced currency management enabled. Use this object to define the exchange rates your organization uses for a date range. This object is not available in single-currency organizations, nor is it available if the organization does not have advanced currency management enabled.

DcSocialProfile

The `DcSocialProfile` object is a read-only object accessible only through the Data.com Social Key API. This object is available in API version 32.0 or later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

This is a read-only object that is accessed by only the Data.com Social Key API

.

Fields

Field Name	Details
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the city where the company is located.
`CompanyName`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The name of the company at which the contact works.
ContactId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique numerical identifier for a contact.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A string that represents the standard abbreviation for the country where the contact works.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** An email address for this contact.
FirstName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name of a contact.
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name of a contact.

Field Name	Details
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The two-letter standard abbreviation for a state.

Usage

Provides social handle information to the Data.com Social Key API.

DcSocialProfileHandle

The `DcSocialProfileHandle` object. a child object to `DcSocialProfile`, is a read-only object accessible only through the Data.com Social Key API. The `DcSocialProfileHandle` object is a child object of the `DcSocialProfile` object.This object is available in API version 32.0 or later.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

This is a read-only object that is accessed by only the Data.com Social Key API

Fields

Field Name	Details
`DcSocialProfileId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique identifier for a contacts social handles.
`Handle`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description A normalized social handle for a contact.
ProviderName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the social media provider.

Usage

Provides social handle information to the Data.com Social Key API.

DeclinedEventRelation

Represents invitees with the status `Declined` for a given event. This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
EventId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
RelationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.

Field Name	Details
RespondedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the most recent date and time when the invitee declined an invitation to the event.
Response	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
Type	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have declined an invitation to an event

```
SELECT eventId, type, response FROM DeclinedEventRelation WHERE eventid='00UTD000000ZH5LA'
```

SEE ALSO:

AcceptedEventRelation

UndecidedEventRelation

DigitalSignature

Represents a signature captured on a service report in field service.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
DigitalSignatureNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the signature.
DocumentBody	**Type** base64 **Properties** Create **Description** The captured signature image.
DocumentContentType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The data type of the captured signature.
DocumentLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The length of the captured signature.
DocumentName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the captured signature image.

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the service appointment, work order, or work order line item that the service report is generated for.
`Place`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The place where the report was signed.
`SignatureType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** The role of the person signing the service report. Your org comes with one signature type, `Default`. A service report template can only contain one signature per type. If you plan to collect multiple signatures on service reports, create additional values for the Signature Type field. Create at least one value for every role that might need to sign a service report. For example, `Technician`, `Customer`, `Supervisor`, or `Supplier`. If some service reports will be signed by multiple people in one role—for example, all technicians present at an appointment—create numbered types: `Technician 1`, `Technician 2`, and so forth. Note: You can create up to 1,000 signature types. You can't delete signature types, but you can deactivate them so they can't be used in service report templates. When you deactivate a type, it still appears on service report templates that used it, but you can't use it on new service report templates.
`SignedBy`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The name of the person signing.

Field Name	Details
`SignedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort **Description** The date and time of the signing.

Usage

Add signature blocks to service report templates to determine which signatures need to be gathered on reports that use the template. Service report templates can contain up to 20 signatures, and each signature must use a different Signature Type. For example, create a standard service report template that contains a customer signature and a technician signature.

To learn more about digital signatures, see Guidelines for Using Signatures on Service Reports.

Division

A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Divisions must be enabled for your organization to access this object. To discover whether divisions have been enabled for an organization, inspect the User or Group object for the `DefaultDivision` field—if it is present, then divisions have been enabled, and this field (the field is named Division in objects other than User and Group) will be available in all relevant objects.
- Customer Portal users can't access this object.

Fields

Field	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the division is active (`true`) or not (`false`). Label is **Active**.

Field	Details
`IsGlobalDivision`	**Type** boolean **Properties** Defaulted on createFilter **Description** Indicates whether the division is your organization's global default division (`true`) or not (`false`). Label is **Global Division**.
`Name`	**Type** string **Properties** Create, Filter, Update **Description** A descriptive name for the division. Limit: 80 characters.
`SortOrder`	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The order in which this division name appears in the Division picklist field when creating or editing users in the Salesforce user interface.

Usage

The values available for that field are the global division ID for the organization, created when divisions are first enabled, and any other division IDs that have been created. The division ID associated with a user is populated in the objects owned or created by the user.

You can use the division ID to make searches, reports, and list views run more quickly and return more relevant results if an organization has very large data sets. For more information, see the Salesforce online help, in the Fields description for the object.

You can use WITH in SOSL to pre-filter results based on division. This is faster than specifying the division in a WHERE clause.

Note: The User object has a `Division` field that is unrelated to this object. The `Division` field is a standard text field similar to Company or Department that has no special properties. Do not confuse it with the `DefaultDivision` field, which does relate to this object.

SEE ALSO:

Object Basics

DivisionLocalization

When the Translation Workbench is enabled for your organization, the DivisionLocalization object provides the translation of the label for a division.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`Language`	**Type** string **Properties** Create, Filter, Nillable, Restricted picklist **Description** The language for this translated label.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.

Field	Details
	• In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the Division associated with the label that is being translated.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the division. Label is **Translation**.

Usage

Use this object to translate the labels of your divisions into the different languages supported by Salesforce.

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the “Edit” permission on documents and the appropriate access to the Folder that contains a document in order to create or update a document in that Folder.

Fields

Field	Details
`AuthorId`	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who is responsible for the Document.
`Body`	**Type** base64 **Properties** Create, Nillable, Update **Description** Required. Encoded file data. If specified, then do not specify a URL.
`BodyLength`	**Type** int **Properties** Filter, Group, Sort **Description** Size of the file (in bytes).
`ContentType`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of content. Label is **Mime Type**. Limit: 120 characters. If the `Don't allow HTML uploads as attachments or document records` security setting is enabled for your organization, you cannot upload files with the following file extensions: `.htm`, `.html`, `.htt`, `.htx`, `.mhtm`, `.mhtml`, `.shtm`, `.shtml`, `.acgi`, `.svg`.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the Document. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Document Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FolderId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Folder that contains the document.
`IsBodySearchable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the contents of the object can be searched using a SOSL `FIND` call. The `ALL FIELDS` search group includes the content as a searchable field.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsInternalUseOnly`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is only available for internal use (`true`) or not (`false`). Label is **Internal Use Only**.

Field	Details
IsPublic	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is available for external use (`true`) or not (`false`). Label is **Externally Available**.
Keywords	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Keywords. Limit: 255 characters.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of the document. Label is **Document Name**.
NamespacePrefix	**Type** string **Properties** Filter, Group, Sort, Nillable

Field	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Type`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** File type of the Document. In general, the values match the file extension for the type of Document (such as pdf or jpg). Label is **File Extension**.
`Url`	**Type** string **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** URL reference to the file (instead of storing it in the database). If specified, do not specify the `Body` or `BodyLength`.

Usage

When creating or updating a document, you can specify a value in either the `Body` or `Url` fields, but not both.

Encoded Data

The API sends and receives the binary file data encoded as a base64 data type. Prior to creating a record, clients must encode the binary file data as base64. Upon receiving an API response, clients must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

Maximum Document Size

You can only create or update documents to a maximum size of 5 MB.

SEE ALSO:

Object Basics

DocumentAttachmentMap

Maps the relationship between an EmailTemplate and its attachment, which is stored as a Document.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`DocumentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the document that this object tracks.
`DocumentSequence`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Represents the order that the attachments will be included in the email defined by the EmailTemplate specified by the `DocumentId`. Label is **Attachment Sequence**. The first attachment is given a value of 0, and each subsequent attachment is given a value incremented by 1.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description ID of the EmailTemplate parent. The attachment identified by `DocumentId` is attached to the EmailTemplate specified in this field.

Usage

Use this object to map the relationship of an EmailTemplate to its attachments, and to specify the order of the attachments.

SEE ALSO:

EmailTemplate

DocumentTag

Associates a word or short phrase with a Document.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference

Field Name	Details
	Properties Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

DocumentTag stores the relationship between its parent TagDefinition and the Document being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Domain

Read-only object that represents a custom Web address assigned to a site in your organization. This object is available in API version 26.0 and later.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.
- Site.com Publisher users have read-only API access to the Domain and DomainSite objects.

Fields

Field	Description
CnameTarget	**Type** string **Properties** Filter, Nillable, Sort **Description** The canonical name (CNAME) of the external host or server. If you use a custom domain with a non-Salesforce provider, such as your own external server or CDN provider, to serve your domain, this field points to the CNAME of the external provider. This field is available in API version 43.0 and later.
Domain	**Type** string **Properties** Filter, Sort **Description** The branded custom Web address within the global namespace identified by this domain's type. In the Domain Name System (DNS) global namespace, this field is the custom Web address that you registered with a third-party domain name registrar. The custom Web address can be used to access the site of this domain.
DomainType	**Type** picklist **Properties** Filter, Group, Sort **Description** The global namespace that this custom Web address belongs to. This value is set to DNS for custom Web addresses in the global DNS. DomainType can have the following values: • Domain Name System (DNS) • Facebook Page
OptionsExternalHttps	**Type** boolean **Properties** Filter **Description** Indicates whether the domain supports secure connections (true) or not (false) via a non-Salesforce content delivery network (CDN) or endpoint. The value of this field is used only if the domain is not pointing to the

Field	Description
	yourdomain.your18characterOrgId.live.siteforce.com CNAME target.

Usage

Use this read-only object to query the domains that are associated with each website in your organization.

DomainSite

Read-only junction object that joins together the Site and Domain objects. This object is available in API version 26.0 and later.

To access this object, Salesforce Sites or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.
- Site.com Publisher users have read-only API access to the Domain and DomainSite objects.

Fields

Field	Description
DomainId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Domain.
PathPrefix	**Type** string **Properties** Filter, Group, Sort **Description** Shows where a site's root exists on a domain. Can only be set for custom Web addresses. Always begins with a `/`.

Field	Description
SiteId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Site.

Usage

Use this read-only object to query or retrieve information about your Lightning Platform site.

DuplicateJob

Represents an instance of a job that identifies duplicates among existing records in the system.

This object is available in API versions 42.0 and later.

A duplicate job is the parent of the DuplicateRecordSet instances that it generates. The duplicate record items in a set generated by a duplicate job are of one object type.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
DuplicateJobDefinitionId	**Type** reference **Properties** Filter, Group, Sort, Update **Description** The ID of the corresponding duplicate job definition.
DuplicateJobStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The current status of a duplicate job. Valid values are `Not Started`, `In Progress`, `Completed`, `Canceled`, `Failed`, `Results Deleted`.

Field Name	Details
EndDateTime	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when a duplicate job was completed.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when a duplicate job was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when a duplicate job was last viewed.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort, Update **Description** The name of a duplicate job.
NumDuplicateRecordItems	**Type** int **Properties** Filter, Group, Sort **Description** The total number of duplicate records identified as a result of invoking a duplicate job.
NumDuplicateRecordSets	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of duplicate record sets identified as a result of invoking a duplicate job.
`NumRecordsScanned`	**Type** int **Properties** Filter, Group, Sort **Description** The number of records scanned as a result of invoking a duplicate job.
`ResultListViewId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** List view metadata for displaying the duplicate record sets identified as result of invoking a duplicate job.
`StartDateTime`	**Type** dateTime **Properties** Filter, Sort **Description** The date and time when a duplicate job was invoked.

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The name of the user who created a duplicate job.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language in the user's personal settings.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The label of the duplicate job.
SobjectSubtype	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The object subtype. Valid values are `Person Account` or `None`.
SobjectType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The object type: account, contact, or lead.

DuplicateJobMatchingRule

Represents a MatchingRule to be used with a DuplicateJob sharing the corresponding DuplicateJobMatchingRuleDefinition.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
DuplicateJobId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the corresponding DuplicateJob.
DuplicateJobMatchRuleDefId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the matching rule defined for the corresponding DuplicateJobMatchingRuleDefinition.
MatchingRuleBooleanFilter	**Type** textarea **Properties** Filter, Sort **Description** Boolean logic of the MatchingRule for this DuplicateJobMatchingRule.
MatchingRuleDescription	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Description of the matching rule for this DuplicateJobMatchingRule.
MatchingRuleName	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The name of the matching rule defined for this particular DuplicateJob invocation.

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition.

This object is available in API versions 42.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
`DuplicateJobDefinitionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of DuplicateJobDefinition (master) for this DuplicateJobMatchingRuleDefinition (detail).
`MatchingRuleId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the MatchingRule to be used with this DuplicateJobMatchingRuleDefinition.

DuplicateRecordItem

Represents an individual record that's part of a duplicate record set. Use this object to create custom report types.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, enable Duplicate Management. A Salesforce admin can grant access to any user with a Sales Cloud or CRM user license.

Fields

Field Name	Details
`DuplicateRecordSetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The duplicate record set that the duplicate record item is assigned to.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated name that's given to the Duplicate Record Item. Label is `Duplicate Record Item Name`.
`RecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The name of the record as it appears on the record's detail page.

DuplicateRecordSet

Represents a group of records that have been identified as duplicates. Each duplicate record set contains one or more duplicate record items. Use this object to create custom report types and view the results of duplicate jobs.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To access this object, enable Duplicate Management. Users must be given read and write access by a Salesforce admin.

Fields

Field Name	Details
DuplicateRuleId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The duplicate rule used to identify this list of duplicate records. **Label** Duplicate Rule ID
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The autogenerated name that's given to the duplicate record set. Label is Duplicate Record Set Name.
RecordCount	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of record items in the set.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `ParentId` represents the parent of a duplicate rule or duplicate job. A `ParentId` is polymorphic. The label is Parent.This field is available in API versions 42.0 and later.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The object that the duplicate rule and all the record items in the set apply to.

DuplicateRule

Represents a duplicate rule for detecting duplicate records.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The developer name for the duplicate rule.

Field Name	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a duplicate rule is active (`true`) or not (`false`). This field is read only.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the duplicate rule.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The label for the duplicate rule.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Field Name	Details
SobjectType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of object the duplicate rule is defined for. For example, account, contact, or lead.

Usage

DuplicateRule is available to organizations that use duplicate rules.

You can only view details of a duplicate rule using the API. You must use the full Salesforce site to create, edit, and delete duplicate rules.

EmailDomainFilter

Represents a filter that determines whether an email relay is restricted to a specific list of domains. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Email Administration," "Customize Application," and "View Setup" user permissions to use this object.

The multiple email relay setting in Setup must be enabled before you can use this API. From Setup, enter *`Email Relay Activation`*, select **Email Relay Activation**, and then select **Try it now!** .

Fields

Field Name	Details
EmailRelayId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the EmailRelay record.

Field Name	Details
FromDomain	**Type** textarea **Properties** Create, Nillable, Update **Description** Restricts the email relay to send emails based on the sender domains (FromDomain) listed in this field. This field is optional, accepts a list of comma-separated values, and supports the wildcard character.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email domain filter is active (true) or not (false). Use this field to enable or disable the email domain filter.
PriorityNumber	**Type** int **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** Indicates the order in which the email domain filter is processed. Filters are evaluated in ascending order. The priority number must be unique. If this field is left blank, it is assigned the next available number and is processed last.
ToDomain	**Type** textarea **Properties** Create, Nillable, Update **Description** Restricts the email relay to send emails based on the recipient domains (ToDomain) listed in this field. This field is optional, accepts a list of comma-separated values, and supports the wildcard character.

Usage

Tip: Keep in mind that if you also plan to activate Bounce Management and Email Compliance Management, confirm with your email admin that your company allows relaying email sent from Salesforce. For more information on bounce management, see Configure Deliverability Settings for Emails Sent from Salesforce.

EmailDomainKey

Represents a domain key for an organization's domain, used to authenticate outbound email that Salesforce sends on the organization's behalf. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Domain`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The organization's domain name that the DKIM key is generated for.
`DomainMatch`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The specificity of match required on the sending domain name before signing with this DKIM key. Valid values are: • `DomainOnly`—Sign if sending domain matches at the domain level only (example.com but not mail.example.com) • `SubdomainsOnly`—Sign if sending domain matches at the subdomain level only (mail.example.com but not example.com) • `DomainAndSubdomains`—Sign if sending domain matches at the domain and subdomain levels (example.com and mail.example.com)
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this DKIM key is active (`true`) or not (`false`). You can set `IsActive` to `true` on create if you specify an existing key pair.

Field Name	Details
`PrivateKey`	**Type** textarea **Properties** Create, Nillable, Update **Description** The private portion of the DKIM key pair used to encrypt mail headers from your domain. Salesforce generates an encrypted `PrivateKey` if you don't specify a value when creating the DKIM key. If you do specify a value, it must be an existing valid `PrivateKey` from another EmailDomainKey object. This field doesn't contain the actual private key, but a value that represents the key in our system. Therefore: • The actual private key can't be leaked. • You can't use the value to do your own email signing.
`PublicKey`	**Type** textarea **Properties** Create, Nillable, Update **Description** Part of the domain key pair that mail recipients retrieve to decrypt the DKIM header and verify your domain. Add the `PublicKey` value to your domain's DNS records before you start signing with this domain key. Otherwise, mail recipients may reject your email.
`Selector`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Text used to distinguish the DKIM key from any other DKIM keys your organization uses for the specified domain.

Usage

Use this object to define a DomainKeys Identified Mail (DKIM) key, which is used to authenticate outbound email that Salesforce sends on your organization's behalf. When you create a DKIM key, Salesforce generates a public and private key pair. You must publish the public key in the DNS, which tells recipients that you, as the owner of the domain, have authorized the use of this key to sign your mail. Salesforce uses the private key to create DKIM signature headers on your outgoing email. Then, recipients of the mail, can compare the signature header with the public key in the DNS to determine that the mail was signed with an authorized key. If your domain also publishes a Domain-based Message Authentication, Reporting and Conformance (DMARC) policy, recipients can use the DKIM signature to verify that the mail conforms to DMARC.

For each domain key you create, we recommend this sequence:

1. Insert the `Domain`, `DomainMatch`, and `Selector`.
2. Update your domain's DNS records.
   a. Locate the DNS record at ***`selector`***`._domainkey.`***`domain`***. For example, `mail._domainkey.mail.example.com`.
   b. Add the `PublicKey` value, like this: `V=DKIM1; p=`***`public_key`***.

   DKIM Signing Outbound Email

   a. In addition, you can optionally put the record in testing mode, which instructs recipients to not make decisions based on the email signature. Add parameter `t=y` to the DNS entry, like this: `V=DKIM1; t=y; p=`***`public_key`***.
3. Update the key via the API or UI to be active.

Consider the following when using domain keys.

- Make sure you add the public key to your DNS record before you make your key active in Salesforce and start DKIM signing. DKIM signing is active whenever your DKIM key is in the active state.
- You can't have more than one active DKIM key per domain name. You might have multiple active DKIM keys if your organization mails from more than a single domain or if you use subdomains under your organizational domain and have specified domain matching at the subdomain level.
- If you want to use the same DKIM key for multiple organizations, you can. Create the key and ensure it's working for one organization first. Then using the API or UI create the key in your other organizations by setting the corresponding fields in the new key to the same values as the original.
- When you insert or update a DKIM key, it's possible that the change affects existing domain keys. For example, if you've set `DomainMatch` to `DomainAndSubdomains` for the example.com domain, and you then set `DomainMatch` to `SubdomainsOnly` for the mail.example.com domain, either key could be used. Here's how we resolve conflicts in the case when DKIM keys overlap.
  - If two keys are equally specific about matching for the same domain, the new key replaces and deactivates the existing key.
  - If a new key is more specific about matching than an existing key, the new key is used and the existing key is modified to inactive.
  - If multiple keys have different domains that match the sending domain, the key with the longest domain name is used. In case of a tie, the most specific key is used. For example, because `DomainOnly` and `SubdomainsOnly` are more specific than `DomainAndSubdomains`, a new `DomainOnly` key would change the `DomainMatch` for an existing `DomainAndSubdomains` key to become `SubdomainsOnly`. In case of a tie, the most specific key is used.

EmailMessage

Represents an email in Salesforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

EmailMessage is only available for organizations that use Email-to-Case or Enhanced Email, which is automatically enabled for most customers.

To use reply and forward functionality, `FromAddress` must specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.

Customer Portal users have read access to EmailMessage if the value for the `ParentID` field is associated with a case. Otherwise, access is determined by sharing access of the associated task.

`update()` is supported only on records whose `Status` is `Draft`, and `IsPrivateDraft` is `false`. Or, if `Status` and `IsPrivateDraft` is *true* and `CreatedBy` is associated with the current use. When a record's is not `Draft`, `update()` is supported only for the `IsExternallyVisible` field and custom fields.. When a record's `Status` is *not* `Draft`, `update()` is supported only for the `IsExternallyVisible` field and custom fields.

Fields

Field	Details
`ActivityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the activity that is associated with the email. Usually represents an open task that is created for the case owner when a new unread email message is received. `ActivityId` can only be specified for emails on cases. It's auto-created for other entities.
`BccAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A string array of email addresses for recipients who were sent a blind carbon copy of the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `BccIds` field instead of adding their email address to the `BccAddress` field. Then the email message is automatically associated with the contact, lead, or user.
`BccIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for contacts, leads, and users who were sent a blind carbon copy of the email message. Each ID is linked to an `EmailMessageRelation` record, which represents the relationship between an email message and a Contact, Lead, or User record.

Field	Details
	Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`CcAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A string array of email addresses for recipients who were sent a carbon copy of the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `CcIds` field instead of adding their email address to the `CcAddress` field. Then the email message is automatically associated with the contact, lead, or user.
`CcIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for contacts, leads, and users who were sent a carbon copy of the email message. Each ID is linked to an `EmailMessageRelation` record, which represents the relationship between an email message and a Contact, Lead, or User record. **Warning:** Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`ContentDocumentIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for content documents, such as files and attachments, that are associated with an email. Each ID is linked to a `ContentDocumentLink` record, which represents the relationship between an email message and a content document record. **Warning:** Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.

Field	Details
FromAddress	**Type** email **Properties** Create, Filter, Nillable, Update **Description** The address that originated the email. When using this field, specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.
FromName	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The sender's name. When using this field, specify an email address that exists in EmailMessageRelation, with a `RelationType` of `FromAddress`.
HasAttachment	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the email was sent with an attachment (`true`) or not (`false`).
Headers	**Type** textarea **Properties** Create, Nillable, Update **Description** The Internet message headers of the incoming email. Used for debugging and tracing purposes. Does not apply to outgoing emails.
HtmlBody	**Type** textarea **Properties** Create, Nillable, Update **Description** The body of the email in HTML format.
Incoming	**Type** boolean **Properties** Create, Defaulted on create, Filter

Field	Details
	Description Indicates whether the email was received (`true`) or sent (`false`).
`IsClientManaged`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group **Description** If EmailMessage is created with `IsClientManaged` set to true, users can modify `EmailMessage.ContentDocumentIds` to link file attachments even when the `Status` of the EmailMessage is not set to `Draft`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsExternallyVisible`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Update **Description** If the community case feed is enabled, `IsExternallyVisible` controls the external visibility of emails in communities. When `IsExternallyVisible` is set to `true`—its default value—email messages are visible to external users in the case feed. Only emails with the `ParentId` field populated are available to be externally visible in communities. This field can't be updated if the email's `Status` is set to `Draft`.
`IsPrivateDraft`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** If `IsPrivateDraft` is set to `true`, then only the `CreatedById` user can view, update, and send this email draft. If `IsPrivateDraft` is set to `false`, then any user with permissions to work on the case can see these drafts. Once the email is sent (Email Status = Draft), then this field is updated to be `false`. Public

Field	Details
	drafts are loaded and visible in Salesforce Classic while Private Drafts are only used in Lightning Experience.
`MessageDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Update **Description** The date the email was created.
`MessageIdentifier`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the email message.
`ParentId`	**Type** ID **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the case that's associated with the email.
`RelatedToId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The `RelatedToId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. RelatedToIds are polymorphic. Polymorphic means a RelatedToId is equivalent to the ID of a related object.
`ReplyToEmailMessageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the inbound or outbound EmailMessage the current EmailMessage is a reply to. It's not possible to reply to a message whose `Status` is `Draft`.

Field	Details
`Status`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Read only. The status of the email. For example, `New`, `Read`, `Replied`, `Sent`, `Forwarded`, or `Draft`.
`Subject`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The subject line of the email.
`ThreadIdentifier`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the email thread the email message belongs to.
`TextBody`	**Type** textarea **Properties** Create, Nillable, Update **Description** The body of the email, in plain text format. If `TextBody` is not set, then it is extracted from `HtmlBody`.
`ToAddress`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** A string array of email addresses for recipients who were sent the email message. Include only email addresses that are not associated with Contact, Lead, or User records in Salesforce. If the recipient is a contact, lead, or user, add their ID to the `ToIds` field instead of adding their email address to the `ToAddress` field. Then the email message is automatically associated with the contact, lead, or user.

Field	Details
ToIds	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of IDs for contacts, leads, and users who were sent the email message. Each ID is linked to an EmailMessageRelation record, which represents the relationship between an email message and a Contact, Lead, or User record. Warning: Adding a JunctionIdList field name to the fieldsToNull property deletes all related junction records. This action can't be undone.
ValidatedFromAddress	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** A picklist value with either the sender's address, validated org-wide email addresses that originated the email, or Email-to-Case Routing Address.

Usage

If your organization uses Email-to-Case, a case is created when an email is sent to one of your company's addresses. The email, which is related to the case by the ParentID field, is stored as an EmailMessage record. When users view the email, they see the EmailMessage record.

If your organization uses Enhanced Email, each email is stored as an EmailMessage record and a Task record. When users view an email, they see the EmailMessage record.

Sample Code—Apex

This sample logs email activity in Salesforce.

```
// if EnhancedEmail Perm is not enabled, continue logging the email as a task

// if EnhancedEmail Perm is enabled, create an EmailMessage object
EmailMessage emailMessage = new EmailMessage();
emailMessage.status = '3'; // email was sent
emailMessage.relatedToId = '006B0000003weZGIAY'; // related to record e.g. an opportunity
emailMessage.fromAddress = 'sender@example.com'; // from address
emailMessage.fromName = 'Dan Perkins'; // from name
emailMessage.subject = 'This is the Subject!'; // email subject
emailMessage.htmlBody = '<html><body><b>Hello</b></body></html>'; // email body
// Contact, Lead or User Ids of recipients
String[] toIds = new String[]{'003B000000AxcEjIAJ'};
```

```
emailMessage.toIds = toIds;
// additional recipients who don’t have a corresponding contact, lead or user id in the
Salesforce org (optional)
emailMessage.toAddress = 'emailnotinsalesforce@toexample.com, anotherone@toexample.com';
insert emailMessage; // insert

// Add Email Message Relation for id of the sender
EmailMessageRelation emr = new EmailMessageRelation();
emr.emailMessageId = emailMessage.id;
emr.relationId = '005B0000003qHvOIAU'; // user id of the sender
emr.relationType = 'FromAddress';
insert emr;
```

SEE ALSO:

Case

Object Basics

EmailMessageRelation

Represents the relationship between an email and contacts, leads, and users. This object is available in API version 37.0 and later

Special Access Rules

EmailMessageRelation is only available for organizations that use Email-to-Case or Enhanced Email, which is automatically enabled for most customers.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`EmailMessageId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the `EmailMessage` record.
`RelationAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The email address of the sender or recipient. Note: If a record relates an email to an existing contact, lead, or user record in Salesforce, the value of `RelationAddress` is null.
`RelationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `RecordId` of the sender or recipient. Note: If a record relates an email to an email address that's not associated with an existing contact, lead, or user record in Salesforce, the value of `RelationId` is null.
`RelationObjectType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the object type of the `RecordId` in the `RelationId` field. It can be a contact, lead, or user.
`RelationType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of relationship the contact, lead, or user has with the email message. Possible values include: • `ToAddress` • `CcAddress` • `BccAddress` • `FromAddress`

Usage

EmailMessageRelation allows an email to be related to contacts, leads, and users.

EmailRelay

Represents the configuration for sending an email relay. An email relay routes email sent from Salesforce through your company's email servers. This object is available in API version 43.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "Email Administration," "Customize Application," and "View Setup" user permissions to use this object.

The multiple email relay setting in Setup must be enabled, before you can use this API. From Setup, enter *`Email Relay Activation`*, select **Email Relay Activation**, and then select **Try it now!** .

Fields

Field Name	Details
`Host`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Indicates the host name or IP address of your company's SMTP server.
`Port`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the port number of your company's SMTP server. • 25 • 587 • 10025 • 11025
`TlsSetting`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Specifies whether Salesforce uses TLS for SMTP sessions. • `Off`: TLS is turned off. SMTP session continues through an insecure connection. • `Preferred`: If the remote server supports TLS, Salesforce upgrades the current SMTP session to use TLS. If TLS is unavailable, Salesforce continues the session without TLS. • `Required`: Salesforce continues the session only if the remote server supports TLS. If TLS is unavailable, Salesforce terminates the session without delivering the email. • `PreferredVerify`: If the remote server supports TLS, Salesforce upgrades the current SMTP session to use TLS. Before the session begins, Salesforce verifies that the certificate is signed by a valid certificate authority, and that the common name presented in the certificate matches the domain or mail exchange of the current connection. If TLS is available but the certificate is not signed or the common name does not match, Salesforce disconnects the session and does not deliver the email. If TLS is unavailable, Salesforce continues the session without TLS. • `RequiredVerify`: Salesforce continues the session only if the remote server supports TLS, the certificate is signed by a valid certificate authority, and the common name presented in the certificate matches the domain or mail exchange to which Salesforce is connected. If any of these criteria are not met, Salesforce terminates the session without delivering the email.

Usage

An email relay must be associated with an active EmailDomainFilter to take effect.

Tip: Keep in mind that if you also plan to activate Bounce Management and Email Compliance Management, confirm with your email admin that your company allows relaying email sent from Salesforce. For more information on bounce management, see Configure Deliverability Settings for Emails Sent from Salesforce.

EmailServicesAddress

An email service address.

Each email service has one or more email addresses to which users can send messages for processing. An email service only processes messages it receives at one of its addresses.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AuthorizedSenders`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Configures the email service address to only accept messages from the email addresses or domains listed in this field. If the email service address receives a message from an unlisted email address or domain, the email service performs the action specified in the `AuthorizationFailureAction` field of its associated email service. Leave this field blank if you want the email service address to receive email from any email address.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This 25-character field must be unique among other EmailServicesAddress records under the same EmailServiceFunction parent. In managed packages, this field prevents naming conflicts on package installations. This field is automatically generated, but you can supply your own value if you create the record using the API. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance might be slow while Salesforce generates one for each record.
`EmailDomainName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A read only field you can query that contains the system-generated domain part of this email service address. The system generates a unique domain-part for each email service address to ensure that no two email service addresses are identical.
`FunctionId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the email service for which the email service address receives messages.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this object is active (true) or not (false).
`LocalPart`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The local-part of the email service address. The local-part of the address is the string that comes before the @ symbol. For the local-part of a Salesforce email address, all alphanumeric characters are valid, plus the following special characters: `! # $ % & amp; ' * / = ? ^ _ + - ` {	} ~ ,` The dot character (.) is also valid as long as it's not the first or last character. Email addresses aren't case-sensitive.
`RunAsUserId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The username of the user whose permissions the email service assumes when processing messages sent to this address.

Usage

This object supports the email services feature, which allows you to create automated processes that use Apex classes to process the contents, headers, and attachments of inbound email. For example, you can create an email service that automatically creates contact records based on contact information in messages.

SEE ALSO:

EmailServicesFunction

EmailServicesFunction

An email service.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AddressInactiveAction`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages received at an email address that is inactive. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`ApexClassId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The ID of the Apex class that the email service uses to process inbound messages. This field is required for API version 12.0 and later.
`AttachmentOption`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the types of attachments the email service accepts. One of the following values: • `None`—The email service accepts the message but discards any attachment. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `NoContent`—The attachment metadata (filename, MIME type, and so on) is provided to the Apex class, but the body is set to `null`. There was no previous numeric value for this choice. • `TextOnly`—The email service only accepts the following types of attachments: – Attachments with a Multipurpose Internet Mail Extension (MIME) type of text. – Attachments with a MIME type of application/octet-stream and a file name that ends with either a .vcf or .vcs extension. These are saved as text/x-vcard and text/calendar MIME types, respectively. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `BinaryOnly`—The email service only accepts binary attachments, such as image, audio, application, and video files. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `All`—The email service accepts any type of attachment. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`AuthenticationFailureAction`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages that fail or do not support any of the authentication protocols if the `IsAuthenticationRequired` field is true. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)

Field	Details
`AuthorizationFailureAction`	**Type** picklist **Properties** Defaulted on create, Group, Sort, Create, Filter, Nillable, Restricted picklist, Update **Description** Indicates what the email service does with messages received from senders who are not listed in the `AuthorizedSenders` field on either the email service or email service address. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`AuthorizedSenders`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Configures the email service to only accept messages from the email addresses or domains listed in this field. If the email service receives a message from an unlisted email address or domain, the email service performs the action specified in the `AuthorizationFailureAction` field. Leave this field blank if you want the email service to receive email from any email address.
`ErrorRoutingAddress`	**Type** email **Properties** Create, Filter, Nillable, Sort, Update **Description** The destination email address for error notification email messages when `IsErrorRoutingEnabled` is `true`.
`FunctionInactiveAction`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages it receives when the email service itself is inactive. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.)
`FunctionName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the email service.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this object is active (`true`) or not (`false`).
`IsAuthenticationRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Configures the email service to verify the legitimacy of the sending server before processing a message. The email service uses the SPF, SenderId, and DomainKeys protocols to verify the sender's legitimacy: If the sending server passes at least one of these protocols and does not fail any, the email service accepts the email. If the server fails a protocol or does not support

Field	Details
	any of the protocols, the email service performs the action specified in the `AuthenticationFailureAction` field.
`IsErrorRoutingEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When incoming email messages can't be processed, indicates whether error notification email messages are routed to a chosen address or to the senders.
`IsTextAttachmentsAsBinary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, text attachments are supplied to the Apex code as a `Messaging.BinaryAttachment` instead of as a `Messaging.TextAttachment`. This means that the body is supplied as an Apex Blob instead of as an Apex String.
`IsTextTruncated`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** This field is deprecated. It is not available as of API version 23.0 and is deprecated and hidden in versions 17.0 through 22.0. In all API versions, the email service now accepts inbound email messages up to the 10 MB size limit, without truncating the text. Previously, it indicated whether the email service truncated and accepted email messages with HTML body text, plain body text, and text attachments over approximately 100,000 characters (`true`) or rejected these email messages and notified the sender (`false`).
`IsTlsRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Not currently in use.
`OverLimitAction`	**Type** picklist

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates what the email service does with messages if the total number of messages processed by all email services combined has reached the daily limit for your organization. One of the following values: • `UseSystemDefault`—The system default is used. (In API version 41.0 and earlier, the value specified for this choice is `0`.) • `Bounce`—The email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `1`.) • `Discard`—The email service deletes the message without notifying the sender. (In API version 41.0 and earlier, the value specified for this choice is `2`.) • `Requeue`—The email service queues the message for processing in the next 24 hours. If the message is not processed within 24 hours, the email service returns the message to the sender with a notification that explains why the message was rejected. (In API version 41.0 and earlier, the value specified for this choice is `3`.) The system calculates the limit by multiplying the number of user licenses by 1,000.

Usage

This object supports the email services feature, which allows you to create automated processes that use Apex classes to process the contents, headers, and attachments of inbound email. For example, you can create an email service that automatically creates contact records based on contact information in messages.

SEE ALSO:

EmailServicesAddress

EmailStatus

Represents the status of email sent.

Supported Calls

`describeSObjects()`

Special Access Rules

Customer Portal users can’t access this object.

Fields

Field	Details
EmailTemplateName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the EmailTemplate.
FirstOpenDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the email was first opened by recipient. Label is **Date Opened**.
LastOpenDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date when the email was last opened by recipient.
TaskId	**Type** reference **Properties** Filter, Group, Sort **Description** The activity (task or event) associated with the email. Label is **Activity ID**.
TimesOpened	**Type** int **Properties** Filter, Group, Sort **Description** Number of times the recipient opened the email.
WhoId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`.

SEE ALSO:

EmailTemplate

EmailTemplate

Represents a template for mass email, or email sent when the activity history related list of a record is modified.

Note: You can't send a mass email using a Visualforce email template.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiVersion`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The API version for this class. Every class has an API version specified at creation.
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** Content of the email. Limit: 384 KB.

Field	Details
`BrandTemplateId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the BrandTemplate associated with this email template. The brand template supplies letterhead information for the email template.
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the template, for example, Promotion Mass Mailing.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Template Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Encoding`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Character set encoding for the template.
`EntityType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort,

Field	Details
	Description When `UIType` is `2` (Lightning Experience) or `3` (Lightning ExperienceSample), `EntityType` indicates which entities this template can be used with (for example, an account, lead, and so on). Valid values are standard object ID prefixes: 001 for account, 003 for contact, 006 for opportunity, and 00Q for lead, 500 for case, and 701 for campaign. This field has been deprecated in API version 39.0. Use `RelatedEntityType` instead.
`FolderId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the folder that contains the template.
`HtmlValue`	**Type** textarea **Properties** Create, Nillable, Update **Description** This field contains the content of the email message, including HTML coding to render the email message. Limit: 384 KB.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that this template is active if `true`, or inactive if `false`.
`LastUsedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this EmailTemplate was last used.
`Markup`	**Type** textarea **Properties** Create, Nillable, Update

Field	Details
	Description The Visualforce markup, HTML, Javascript, or any other Web-enabled code that defines the content of the template.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the template. Label is **Email Template Name**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field cannot be accessed unless the logged-in user has the "Customize Application" permission.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the template.
`RelatedEntityType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, **Description** When `UIType` is `2` (Lightning Experience) or `3` (Lightning ExperienceSample), `RelatedEntityType` indicates which entities this template can be used with. Valid values are the entity API name: "Account" for account, "Contact" for contact, "Opportunity" for opportunity, "Lead" for lead, and so on. The value can be any entity the user has read access to (including custom entities) but not virtual entities, setup entities, or platform entities. No restrictions exist at the schema level.
`Subject`	**Type** string **Properties** Create, Group, Nillable, Sort, Update **Description** Content of the subject line.
`TemplateStyle`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Style of the template, such as formalLetter or freeform.
`TemplateType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Type of template, either HTML, text, or custom templates, or those templates generated by Visualforce.
`TimesUsed`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of times this template has been used.
`UIType`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, , Restricted picklist, Sort, **Description** Indicates the user interface where this template is usable. Valid values are: `1` (Salesforce Classic), `2` (Lightning Experience), and `3` (Lightning Experience Sample).

Usage

To retrieve this object, issue a describe call on an object, which returns a query result for each activity since the object was created. You can't query these records.

SEE ALSO:

Attachment

EmailStatus

DocumentAttachmentMap

EmbeddedServiceDetail

Represents a metadata catalog object that exposes fields from the underlying Embedded Service setup objects defined in each EmbeddedServiceConfig deployment for guest users. Guest users don't have direct access to the Embedded Service setup objects. Available in API version 39.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

`GET`

Fields

Field	Details
`AvatarImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used as the agent avatar image.

Field	Details
CancelApptBookingFlowName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the appointment cancellation flow for Snap-ins Appointment Management (beta).
ContrastInvertedColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Accent branding color used in the snap-in, displayed as a hexadecimal value. Changes made to this field in the API aren't reflected in the snap-in.
ContrastPrimaryColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `ContrastPrimaryColor` field in the EmbeddedServiceBranding setup object.
CustomMinimizedComponent	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The custom Lightning component that's used for the minimized snap-in for this Snap-ins Chat deployment.
CustomPrechatComponent	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The custom Lightning component that's used for the pre-chat page for this Snap-ins Chat deployment.
DurableID	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Developer name for the EmbeddedServiceConfig.
`FieldServiceConfirmCardImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the confirmation card in Snap-ins Appointment Management (beta).
`FieldServiceHomeImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the home screen in Snap-ins Appointment Management (beta).
`FieldServiceLogoImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the logo used for the home screen in Snap-ins Appointment Management (beta).
`FlowDeveloperName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name of the flow used to create a new appointment in Snap-ins Appointment Management (beta).
`Font`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Font used in the chat text of the Snap-ins chat widget.

Field	Details
`FontSize`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Font size for the snap-in. Possible values are: • Small • Medium • Large
`HeaderBackgroundImg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the header background in Snap-ins Chat.
`Height`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Height of the snap-in.
`IsFieldServiceEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether Field Service is enabled for this Snap-ins deployment (`true`) or not (`false`). Snap-ins Appointment Management is currently beta.
`IsLiveAgentEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether Live Agent is enabled for this Snap-ins deployment (`true`) or not (`false`).

Field	Details
IsOfflineCaseEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether offline support is enabled for this Snap-ins deployment (`true`) or not (`false`).
IsPreChatEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Value of the `PreChatEnabled` field in the EmbeddedServiceLiveAgent setup object.
IsQueuePositionEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether queue position (displaying the customer's place in line while they wait for an agent) is enabled for this Snap-ins Chat deployment (`true`) or not (`false`).
ModifyApptBookingFlowName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the flow used for modifying an existing appointment for Snap-ins Appointment Management (beta).
NavBarColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `NavBarColor` field in the EmbeddedServiceBranding setup object.
OfflineCaseBackgroundImg	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description URL of the image used for the background for the offline support case form in Snap-ins Chat.
PrechatBackgroundImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the background for the pre-chat form in Snap-ins Chat.
PrimaryColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Value of the `PrimaryColor` field in the EmbeddedServiceBranding setup object.
SecondaryColor	**Type** string **Properties** Filter, Group, Nillable Sort **Description** Value of the `SecondaryColor` field in the EmbeddedServiceBranding setup object.
ShouldHideAuthDialog	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the prompt that the customer log in again during a flow should be hidden (`true`) or not (`false`). When it's hidden, the customer is taken directly to your login page.
ShouldShowExistingAppointment	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether to display a button on the home screen for customers to access their existing appointments (`true`) or not (`false`) for Snap-ins Appointment Management (beta).

Field	Details
ShouldShowNewAppointment	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether to display a button on the home screen for customers to create a new appointment (`true`) or not (`false`) for Snap-ins Appointment Management (beta).
Site	**Type** string **Properties** Filter, Group, Nillable Sort **Description** Value of the `Site` field in the EmbeddedServiceConfig setup object.
SmallCompanyLogoImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the logo image used with Snap-ins Chat.
WaitingStateBackgroundImg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the image used for the background image in Snap-ins Chat while the customer waits to be connected with a support agent.
Width	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Width of the snap-in.

Note: Any changes you make to the image fields override what you've entered in Setup. We recommend setting your Snap-ins image URLs in Setup.

Entitlement

Represents the customer support an account or contact is eligible to receive. This object is available in API version 18.0 and later. Entitlements may be based on an asset, product, or service contract.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Account associated with the entitlement.
`AssetId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the Asset associated with the entitlement. Must be a valid asset ID.
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the BusinessHours associated with the entitlement. Must be a valid business hours ID.
`CasesPerEntitlement`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of cases the entitlement supports. This field is only available if `IsPerIncident` is `true`.

Field	Details
ContractLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the ContractLineItem associated with the entitlement. Must be a valid ID.
EndDate	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The last day the entitlement is in effect.
IsPerIncident	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the entitlement is limited to supporting a specific number of cases (`true`) or not (`false`).
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string

Field	Details
	Properties Create, Filter, Update **Description** Required. Name of the entitlement.
`SvcApptBookingWindowsId`	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours that the entitlement's work orders should respect. The label in the user interface is `Operating Hours`. Available only if Field Service Lightning is enabled.
`RemainingCases`	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The number of cases the entitlement can support. This field decreases in value by one each time a case is created with the entitlement. This field is only available if `IsPerIncident` is selected.
`ServiceContractId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Required. ID of the ServiceContract associated with the entitlement. Must be a valid ID.
`SlaProcessId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the SlaProcess associated with the entitlement. This field is available in version 19.0 and later.
`StartDate`	**Type** date

Field	Details
	Properties Create, Filter, Nillable, Update **Description** The first date the entitlement is in effect.
`Status`	**Type** picklist **Properties** Filter, Nillable **Description** Status of the entitlement, such as `Expired`.
`SvcApptBookingWindows`	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours of the entitlement. This field is visible only if Field Service Lightning is enabled.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The type of entitlement, such as Web or phone support.

SEE ALSO:
EntitlementContact
EntitlementHistory
SlaProcess

EntitlementContact

Represents a Contact eligible to receive customer support via an Entitlement. This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Contact associated with the entitlement. Must be a valid ID.
`EntitlementId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the Entitlement associated with the entitlement contact. Must be a valid ID.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Nillable **Description** Required. Name of the entitlement contact.

Usage

Use to query and manage entitlement contacts.

SEE ALSO:

Entitlement

EntitlementHistory

EntitlementFeed

Represents a single feed item in the feed displayed on the detail page for an entitlement. An entitlement feed shows recent changes to an entitlement record for any fields that are tracked in feeds, and comments and posts about the record. It's a useful way to stay up-to-date with changes to entitlements. This object is available in API version 23.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Entitlement object
- "Moderate Chatter"

> Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the EntitlementFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's

Field Name	Details
	approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is `ContentPost`. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.

Field Name	Details
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** The ID of the user who added this object to the feed. For example, if a client application migrates multiple posts and comments from another application into a feed, `InsertedById` is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • <p> Tip: Though the tag isn't supported, you can use <p> </p> to create lines. • <b> • <code> • <i>

Field Name	Details
	• `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on the feed item, then `LastModifiedDate` becomes the `CreatedDate` for the FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of the `LinkPost`.

Field Name	Details
NetworkScope	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the entitlement record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as an EntitlementFeed object of `Type ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the EntitlementFeed. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of EntitlementFeed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field Name	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default.

Field Name	Details
	• External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for an entitlement record.

SEE ALSO:

Entitlement

EntitlementHistory

EntitlementContact

FeedItem

EntitlementHistory

Represents the changes to field values on an Entitlement. This object is available in API version 18.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`EntitlementId`	**Type** reference **Properties** Filter **Description** Required. ID of the Entitlement.
`Field`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The name of the field that was changed.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable **Description** The latest value of the field before it was changed.

Usage

This object respects field-level security on the parent object.

SEE ALSO:

Entitlement

EntitlementContact

EntitlementTemplate

Represents predefined terms of customer support for a product (Product2). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

All users, even those without the "View Setup and Configuration" user permission, can view entitlement templates via the API.

Fields

Field	Details
BusinessHoursId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the BusinessHours associated with the entitlement template. Must be a valid business hours ID.
CasesPerEntitlement	**Type** int **Properties** Create, Filter, Nillable, Update **Description** The total number of cases the entitlement template supports. This field is only available if `IsPerIncident` is `true`.
IsPerIncident	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the entitlement template is limited to supporting a specific number of cases (`true`) or not (`false`).
Name	**Type** string **Properties** Create, Filter, idLookup, Update **Description** Required. Name of the entitlement template.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation.

Field	Details
	The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. Available in version 34.0 and later.
`SlaProcessId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the SlaProcess associated with the entitlement template. This field is available in API version 19.0 and later.
`Term`	**Type** int **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** Number of days that the entitlement template is valid.
`Type`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** The type of entitlement template, such as Web or phone support.

Usage

Use this object to manage entitlement templates.

EntityHistory

Represents historical information about an object's changed field values. This object is only available to users with the "View All Data" permission. This object is unavailable beginning with API version 8.0. Use the object-specific History objects instead: CaseHistory, ContractHistory, LeadHistory, OpportunityFieldHistory, OpportunityHistory ProcessInstanceHistory, QuantityForecastHistory, RevenueForecastHistory, or SolutionHistory.

Supported Calls

`describeSObjects()`, `getUpdated()`, `getDeleted()`, `query()`, `retrieve()`

Fields

Field	Details
`FieldName`	**Type** picklist **Properties** Filter, Restricted picklist **Description** ID of the standard or custom field.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable **Description** New value of the modified field.
`OldValue`	**Type** anyType **Properties** Nillable **Description** Previous value of the modified field.

Field	Details
`ParentId`	**Type** reference **Properties** Filter **Description** ID of the object that contains the field.
`ParentSobjectType`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The kind of object that contains the field.

Usage

In API version 7.0 and later, this object works with Case, Contract, and Solution objects:

- This object is always read-only in the online application.
- When a field is modified, this object records both the old and new field values. There are exceptions to this behavior for certain fields such as long text areas and multi-select picklists. These fields appear in this object to indicate that the field was changed, but the old and new values are not recorded.
- Two rows are added to this object when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, "Jane Doe" is recorded as the name of a contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.
- Up to a total of twenty fields (standard or custom) can be tracked for a given object.
- In the online application, you can specify which fields are tracked or not tracked at any time.
- As soon as tracking is turned on for a field, all changes to its value are recorded in the database.
- Turning off tracking for a field stops further changes from being recorded, but the history data is not deleted.
- Be advised that deleting a custom field also permanently deletes the history data for that custom field.

EntityMilestone

Represents a required step in a customer support process on a work order. The Salesforce user interface uses the term "object milestone." This object is available in API version 37.0 and later.

Note: Milestones on cases use the CaseMilestone object type.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Special Access Rules

- Entitlement management must be enabled.
- Work orders or Field Service Lightning must be enabled.

Fields

Field Name	Details
`ActualElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`ActualElapsedTimeInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`ActualElapsedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes that it took to complete a milestone. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time) Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.

Field Name	Details
BusinessHoursId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The business hours on the milestone. If business hours aren't specified, the entitlement process business hours are used. If business hours are also not specified on the entitlement process, the business hours on the record are used.
CompletionDate	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The date and time the milestone was completed.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
ElapsedTimeInDays	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
ElapsedTimeInHrs	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the

Field Name	Details
	business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
`ElapsedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes it took to complete a milestone, including time during which the milestone was stopped. Automatically calculated to include the business hours on the record. Elapsed time is calculated only after the Completion Date field is populated. (Elapsed Time) – (Stopped Time) = (Actual Elapsed Time).
`IsCompleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Icon ( ) that indicates a milestone completion.
`IsViolated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Icon ( ) that indicates a milestone violation.
`MilestoneTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the milestone (for instance, First Response).
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the milestone.

Field Name	Details
`ParentEntityId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the record—for example, a work order—that contains the milestone.
`SlaProcessId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The entitlement process associated with the milestone.
`StartDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The date and time that milestone tracking started.
`StoppedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information. Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`StoppedTimeInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information.

Field Name	Details
	Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`StoppedTimeInMins`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of minutes that an agent has been blocked from completing a milestone. For example, an agent may be waiting for a customer to reply with more information. Note: To display this field, select **Enable stopped time and actual elapsed time** on the Entitlement Settings page and add the field to the object milestone page layout.
`TargetDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time to complete the milestone.
`TargetResponseInDays`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of days to complete the milestone. Automatically calculated to include the business hours on the record.
`TargetResponseInHrs`	**Type** double **Properties** Filter, Nillable, Sort **Description** The number of hours to complete the milestone. Automatically calculated to include the business hours on the record.
`TargetResponseInMins`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The number of minutes to complete the milestone. Automatically calculated to include the business hours on the record.
`TimeRemainingInDays`	**Type** string **Properties** Filter, Nillable, Sort **Description** The days that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeRemainingInHrs`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The hours that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeRemainingInMins`	**Type** string **Properties** Group, Nillable, Sort **Description** The minutes that remain before a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInDays`	**Type** string **Properties** Filter, Nillable, Sort **Description** The days that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInHrs`	**Type** string **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The hours that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.
`TimeSinceTargetInMins`	**Type** string **Properties** Group, Nillable, Sort **Description** The minutes that have elapsed since a milestone violation. Automatically calculated to include the business hours on the record.

Usage

When you create an entitlement process, you select its type based on the type of record that you want the process to run on: Case or Work Order. Processes created before Summer '16 use the Case type. When a Work Order entitlement process runs on a work order, the resulting milestones on the work order are object milestones. Conversely, when a Case entitlement process runs on a case, the resulting milestones are case milestones, a separate standard object.

Tip: If an entitlement has an entitlement process associated with it, don't use the entitlement for multiple types of support records. An entitlement process works only on records that match the process's type. For example, when a Case entitlement process is applied to an entitlement, the process runs only on cases associated with that entitlement. If a work order is also associated with the entitlement, the process doesn't run on the work order. To ensure that the milestones you set up work as expected, associate a customer's work orders and cases with different entitlements.

Customize page layouts, validation rules, and more for object milestones from the Object Milestones node in Setup under Entitlement Management.

EntitySubscription

Represents a subscription for a user following a record or another user. This object is available in API version 34.0 and later.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the community that this file originated from. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the record or user which the user is following.
`SubscriberId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the User who is following the record or user.

Usage

Consider this when following records and users:

- Users can only follow records that they can see.
- Users can see which records other users are following, unless they don't have access to the records.
- Administrators and users with the "Modify All Users" permission can configure a user to follow records that the user has read access to.
- Administrators and users with the "Modify All Users" permission can configure users to stop following records.
- Following topics is available in API version 29.0 and later. For this reason, a topic ID is now a supported value for the `ParentId` field.
- If you deactivate a user, any EntitySubscription where the user is associated with the ParentId or SubscriberId field, meaning all subscriptions both to and from the user, are soft deleted. If the user is reactivated, the subscriptions are restored. However, if you deactivate multiple users at once and these users follow each other, their subscriptions are hard deleted. In this case, the user-to-user EntitySubscription is deleted twice (double deleted). Such subscriptions can't be restored upon user reactivation.

When using `query()` with EntitySubscription,

- Note the following SOQL restriction. No SOQL limit if logged-in user has "View All Data" permission. If not, specify a LIMIT clause of 1,000 records or fewer.
- A query using a `WHERE` clause can only filter by fields on the EntitySubscription object.
- If user sharing is enabled and the querying user is not an administrator, a SOQL query must be constrained either by the `ParentId` or `SubscriberId`. Otherwise, the query behavior at run time is undefined, meaning the result set can be incomplete or inconsistent from invocation to invocation. For an unconstrained query, the sharing check limits imposed on a non-adminstrative user are likely to be exceeded before the query completes, because access checks are run against both parent and subject, for each row of the result set. We recommend using the Chatter REST API to query EntitySubscription data instead of running a SOQL query.
- Users without the "View All Data" permission
  - Need read access on the object associated with the `ParentId` field to see which users are following records for the object.
  - Can use an `ORDER BY` clause in a query only to order by fields on the EntitySubscription object. For example, if the subscription relates to an Account record, the query can `ORDER BY ParentId`, but it can't `ORDER BY Account.Name`.
  - Don't always get all matching subscriptions when running a query. For these users, a query evaluates visibility criteria on a maximum of 500 records to reduce the prospect of long-running queries. If a user runs a query to see the CEO's subscriptions, it might scan a large number of records. The query only returns matches within the first 500 records scanned. It is possible that there are more subscriptions that are visible to the user, but they are not returned. To mitigate this, we recommend using a `WHERE` clause, if possible, to reduce the scope of the query.

Sample—SOQL

The following SOQL query returns subscriptions for all the accounts that a subscriber is following that have more than 10 employees:

```
SELECT Id
FROM EntitySubscription
WHERE SubscriberId = '005U0000000Rg2CIAS'
AND ParentId IN (
  SELECT Id FROM Account
  WHERE NumberOfEmployees > 10
)
LIMIT 200
```

SEE ALSO:

AccountFeed
CaseFeed
ContactFeed
OpportunityFeed
SolutionFeed

EnvironmentHubMember

Represents a member organization in the Environment Hub. This object is available in API version 29.0 and later.

Note: You can only create 20 member orgs per day. If you need to create additional orgs, log a case in the Partner Community.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field Name	Details
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** System field that specifies the date and time when this record was created.
`Description`	**Type** string **Properties** Nillable, Update **Description** A brief description of this organization.
`DisplayName`	**Type** string **Properties** Filter, Group, Nillable,Sort, Update **Description** The name that the user has specified for this member organization.
`EnvironmentHubId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The Organization ID of this member's Environment Hub organization.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** System field that uniquely identifies this record.

Field Name	Details
`IsFedIdSsoMatchAllowed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if single sign-on has been enabled based on matching Federation ID. The default value is `false`.
`IsSandbox`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates if the member organization is a sandbox (`true`) or not (`false`). This field is available in API version 36.0 and later.
`MemberEntity`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The unique Organization ID of the member organization for this record.
`MemberType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of member organization for this record. Possible values include `Branch Org`, `Patch Org`, `Release Org`, `Sandbox Org`, `Trialforce Management Org`, and `Trialforce Source Org`. Note: Only one member type at a time is stored. Member type is determined according to this hierarchy: (1) Sandbox, (2) Release, (3) Trialforce Source Org (TSO), (4) Patch, (5) Branch, and (6) Trialforce Management Org (TMO). For example, if an org is both a sandbox and a TMO, the value of `MemberType` is `Sandbox Org`.
`Name`	**Type** string **Properties** Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description The name of the member organization for this record.
`OrgEdition`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The organization's edition, for example, Enterprise Edition or Unlimited Edition.
`OrgStatus`	**Type** picklist **Properties** Filter, Group, Sort, Update **Description** The licensing or creation status of this organization. Possible values include `Active`, `Demo`, `Deleted`, `Free`, `Inactive`, and `Trial`.
`Origin`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The method by which this organization was added to the Environment Hub. Possible values are `Auto Discovered`, `User Added`, and `Provisioned`.
`ServiceProviderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the service provider for this member organization. This field is available in API version 36.0 and later.
`ShouldAddRelatedOrgs`	**Type** boolean **Properties** Defaulted on create, Update **Description** If related organizations should be automatically connected to the hub when this member organization is added. The default value is `true`.

Field Name	Details
ShouldEnableSSO	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If SSO should be enabled when this member organization is added. The default value is `false`.
SSOMappedUsers	**Type** int **Properties** Filter, Group, Nillable, Sort, Update **Description** The total number of mapped users in this member organization. This field is available in API version 36.0 and later.
SsoStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If single sign-on has been enabled for this organization. Possible values are: • `Enabled`—Single sign-on is enabled. • `Disabled`—Single sign-on is disabled. • `Pending`—Single sign-on is in the process of being enabled. • `Failed`—Single sign-on enablement failed. Contact Salesforce support for assistance.
SsoUsernameFormula	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** The custom formula for matching users in the hub and member organizations.

Usage

Use this object to access and modify settings of member organizations in the Environment Hub.

Event

Represents an event in the calendar. In the user interface, event and task records are collectively referred to as activities.

Note:

- An EventRelation object can't be related to a child event, and child events don't include the invitee related list.
- `query()`, `delete()`, and `update()` aren't allowed with events related to more than one contact in API versions 25.0 and earlier.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AcceptedEventInviteeIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs who accepted this event. This `JunctionIdList` is linked to the `AcceptedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the related Account. The `AccountId` is determined as follows. If the value of `WhatId` is any of the following objects, then Salesforce uses that object's `AccountId`. • Account • Opportunity • Contract • Custom object that is a child of Account If the value of the `WhatId` field is any other object, and the value of the `WhoId` field is a Contact object, then Salesforce uses that contact's `AccountId`. (If your organization uses Shared Activities, Salesforce uses the `AccountId` of the primary contact.)

Field	Details
	Otherwise, Salesforce sets the value of the `AccountId` field to `null`. For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `true`. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don't attempt to alter the timestamp to account for time zone differences. Label is **Due Date Only**. This field is required in versions 12.0 and earlier if the `IsAllDayEvent` flag is set to `true`. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ActivityDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Contains the event's due date if the `IsAllDayEvent` flag is set to `false`. This field is a regular Date/Time field with a relevant time portion. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. Label is **Due Date Time**. This field is required in versions 12.0 and earlier if the `IsAllDayEvent` flag is set to `false`. The value for this field and `StartDateTime` must match, or one of them must be `null`.
`ClientGuid`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The client globally unique identifier identifies the external API client used to create the event. Label is **Client GUID**.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`DeclinedEventInviteeIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact, lead, or user IDs who declined this event. This `JunctionIdList` is linked to the `DeclinedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains a text description of the event. Limit: 32,000 characters.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`DurationInMinutes`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains the event length, in minutes. Even though this field represents a temporal value, it is an integer type—not a Date/Time type. Required in versions 12.0 and earlier if `IsAllDayEvent` is false. In versions 13.0 and later, this field is optional, depending on the following:

Field	Details
	• If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If the multiday event feature is enabled, then API versions 13.0 and later support values greater than 1440 for the `DurationInMinutes` field. API versions 12.0 and earlier can't access event objects whose `DurationInMinutes` is greater than 1440. For more information, see **Multiday Events**. Depending on your API version, errors with the `DurationInMinutes` and `EndDateTime` fields may appear in different places. • Versions 38.0 and before—Errors always appear in the `DurationInMinutes` field. • Versions 39.0 and later—If there's no value for the `DurationInMinutes` field, errors appear in the `EndDateTime` field. Otherwise, they appear in the `DurationInMinutes` field.
`EndDateTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Available in versions 13.0 and later. This field is a regular Date/Time field with a relevant time portion. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. This field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. Depending on your API version, errors with the `DurationInMinutes` and `EndDateTime` fields may appear in different places. • Versions 38.0 and before—Errors always appear in the `DurationInMinutes` field. • Versions 39.0 and later—If there's no value for the `DurationInMinutes` field, errors appear in the `EndDateTime` field. Otherwise, they appear in the `DurationInMinutes` field.
`EventSubtype`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for events. This field isn't updateable.
`EventWhoIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs used to create many-to-many relationships with a shared event. `EventWhoIds` is available when the shared activities setting is enabled. The first contact or lead ID in the list becomes the primary `WhoId` if you don't specify a primary `WhoId`. If you set the `EventWhoIds` field to null, all entries in the list are deleted and the value of `WhoId` is added as the first entry. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`GroupEventType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Read-only. Available in API versions 19.0 and later. The possible values are: • `0` (Non–group event)—An event with no invitees. • `1` (Group event)—An event with invitees. • `2` (Proposed event)—An event created when a user requests a meeting with a contact, lead, or person account using the Salesforce user interface. When the user confirms the meeting, the proposed event becomes a group event. You can't create, edit, or delete proposed events in the API. This value is no longer used in API version 41.0 and later.
`IsAllDayEvent`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the `ActivityDate` field (`true`) or the `ActivityDateTime` field (`false`) is used to define the date or time of the event. Label is **All-Day Event**. See also `DurationInMinutes` and `EndDateTime`.

Field	Details
IsArchived	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event has been archived.
IsChild	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is a child of another event (`true`) or not (`false`). For a child event, you can update `IsReminderSet` and `ReminderDateTime` only. You can query and delete a child event. If the objects related to the child event are different from those related to the parent event (this difference is possible if you use API version 25.0 or earlier) and one of the objects related to the child event is deleted, the objects related to the parent event are updated to ensure data integrity.
IsClientManaged	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is managed by an external client. If the value of this field is false, the event isn't owned or managed by an external client, and Salesforce can be used to update it. If the value is true, Salesforce can be used to change only noncritical fields on the event. Label is **Is Client Managed**.
IsGroupEvent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is a group event—that is, whether it has invitees (`true`) or not (`false`).
IsPrivate	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether users other than the creator of the event can (`false`) or can't (`true`) see the event details when viewing the event user's calendar. However, users with the View All Data or Modify All Data permission can see private events in reports and searches, or when viewing other users' calendars. Private events can't be associated with opportunities, accounts, cases, campaigns, contracts, leads, or contacts. Label is **Private**.
`IsRecurrence`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event is scheduled to repeat itself (`true`) or only occurs once (`false`). This is a read-only field when updating records, but not when creating them. If this field value is `true`, then `RecurrenceEndDateOnly`, `RecurrenceStartDateTime`, `RecurrenceType`, and any recurrence fields associated with the given recurrence type must be populated. Label is **Create recurring series of events**.
`IsReminderSet`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the activity is a reminder (`true`) or not (`false`).
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether an event associated with an object can be viewed in the Customer Portal (`true`) or not (`false`). If your organization has enabled Communities, events marked `IsVisibleInSelfService` are visible to any external user in the community, as long as the user has access to the record the event was created on. This field is available when Customer Portal or partner portal are enabled OR Communities is enabled and you have Customer Portal or partner portal licenses.
`Location`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Contains the location of the event.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Contains the ID of the user who owns the event. Label is **Assigned to ID**.
`RecurrenceActivityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read-only. Not required on create. Contains the ID of the main record of the recurring event. Subsequent occurrences have the same value in this field.
`RecurrenceDayOfMonth`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the day of the month on which the event repeats.
`RecurrenceDayOfWeekMask`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the day or days of the week on which the event repeats. This field contains a bitmask. The values are as follows: • Sunday = `1` • Monday = `2` • Tuesday = `4` • Wednesday = `8` • Thursday = `16` • Friday = `32` • Saturday = `64` Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.

Field	Details
RecurrenceEndDateOnly	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the last date on which the event repeats. For multiday recurring events, this is the day on which the last occurrence starts. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don’t attempt to alter the timestamp to account for time zone differences.
RecurrenceInstance	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the frequency of the event’s recurrence. For example, `2nd` or `3rd`.
RecurrenceInterval	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the interval between recurring events.
RecurrenceMonthOfYear	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the month in which the event repeats.
RecurrenceStartDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the date and time when the recurring event begins. The value must precede the `RecurrenceEndDateOnly`. This field is a regular Date/Time field with a relevant time portion. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate.

Field	Details
RecurrenceTimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the time zone associated with a recurring event. For example, "UTC-8:00" for Pacific Standard Time.
RecurrenceType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the event repeats. For example, daily, weekly, or every nth month (where "nth" is defined in `RecurrenceInstance`).
ReminderDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
ShowAs	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how this event appears when another user views the calendar: Busy, Out of Office, or Free. Label is **Show Time As**.
StartDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the start date and time of the event. Available in versions 13.0 and later. If the Event `IsAllDayEvent` flag is set to true (indicating that it is an all-day Event), then the event start date information is contained in the `StartDateTime` field. This field is a

Field	Details
	regular Date/Time field with a relevant time portion. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. Translate the time portion to or from a local time zone for the user or the application, as appropriate. If the Event `IsAllDayEvent` flag is set to false (indicating that it is not an all-day event), then the event start date information is contained in the `StartDateTime` field. The time portion is always transferred in the Coordinated Universal Time (UTC) time zone. You need to translate the time portion to or from a local time zone for the user or the application, as appropriate. If this field has a value, then `ActivityDate` and `ActivityDateTime` must either be `null` or match the value of this field.
`Subject`	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** The subject line of the event, such as Call, Email, or Meeting. Limit: 255 characters.
`Type`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Indicates the event type, such as Call, Email, or Meeting.
`UndecidedEventInviteeIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact, lead, or user IDs who are undecided about this event. This `JunctionIdList` is linked to the `UndecidedEventRelation` child relationship. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`WhatCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available if your organization has enabled Shared Activities. Represents the count of related EventRelations pertaining to the `WhatId`. The count of the `WhatId` must be *1* or less.

Field	Details
WhatId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatIds` are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
WhoCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available to organizations that have Shared Activities enabled. Represents the count of related EventRelations pertaining to the `WhoId`.
WhoId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. If the `JunctionIdList` field is used, all `WhoIds` are included in the relationship list. Beginning in API version 37.0, if the contact or lead ID in the `WhoId` field is not in the `EventWhoIds` list, no error occurs and the ID is added to the `EventWhoIds` as the primary `WhoId`. If `WhoId` is set to null, an arbitrary ID from the existing `EventWhoIds` list is promoted to the primary position.

Usage

Use Event to manage calendar appointments.

Querying and Filtering Events

Queries on events will be denied before they time out if they involve amounts of data that are deemed too large. In such cases, the exception code `OPERATION_TOO_LARGE` is returned. If you receive `OPERATION_TOO_LARGE`, refactor your query to return or scan a smaller amount of data.

When querying for events with a specific due date, you must filter on both the `ActivityDateTime` and `ActivityDate` fields. For example to find all events with a due date of February 14, 2003, you need two filters:

- One filter with the `ActivityDate` field equal to the Coordinated Universal Time (UTC) time zone on February 14, 2003.
- One filter with the `ActivityDateTime` field greater than or equal to midnight on February 14, 2003 in the user's local time zone AND less than or equal to midnight on February 15, 2003 in the user's local time zone.

Alternatively, in version 13.0 and later, you can find events with a specific due date by filtering on `StartDateTime`. For example, to find all events with a due date of February 14, 2003, filter with the `StartDateTime` greater than or equal to midnight on February 14, 2003 in the user's local time zone AND less than or equal to midnight on February 15, 2003 in the user's local time zone.

The `EventId` field of an EventRelation object always points to the master record. An invitee on a group event can query the EventRelation object to view the master record.

Multiday Events

- Multiday events are available in version 13.0 and later. Also, in earlier versions SOQL queries do not return multiday events.
- Multiday events are enabled through the user interface from Setup by entering *`Activity Settings`* in the `Quick Find` box, then selecting **Activity Settings**.
- If the multiday event feature is enabled, then API versions 13.0 and later support values greater than 1440 for the `DurationInMinutes` field. API versions 12.0 and earlier can't access event objects whose `DurationInMinutes` is greater than 1440.
- Multiday events can't exceed 14 days.

Recurring Events

- Recurring events are available in version 7.0 and later.
- After an event is created, it can't be changed from recurring to nonrecurring or vice versa.
- When you delete a recurring event series through the API, all past and future events in the series are removed. However, when you delete a recurring event series through the user interface, only future occurrences are removed.
- When creating a recurring event series, the duration of the event must be 24 hours or less (either the `DurationInMinutes` or the difference between `RecurrenceStartDateTime` and `EndDateTime` must be greater than 24 hours). Once the recurring event series is created, you can extend the length of individual occurrences beyond 24 hours if Multiday events are enabled; see **Multiday Events**.
- If `IsRecurrence` is `true`, then `RecurrenceStartDateTime`, `RecurrenceEndDateOnly`, `RecurrenceType`, and any properties associated with the given recurrence type (see the following table) must be populated.
- When updating a recurring event series, it's not possible to update the EventRelation for the event series object and the EventRelation for the series object occurrences at the same time.

The following table describes the usage of recurrence fields. Each recurrence type must have all of its properties set. All unused properties must be set to null.

RecurrenceType Value	Properties	Example Pattern
RecursDaily	RecurrenceInterval	Every second day
RecursEveryWeekday	RecurrenceDayOfWeekMask	Every weekday - can't be Saturday or Sunday
RecursMonthly	RecurrenceDayOfMonth RecurrenceInterval	Every second month, on the third day of the month

RecurrenceType Value	Properties	Example Pattern
RecursMonthlyNth	RecurrenceInterval RecurrenceInstance RecurrenceDayOfWeekMask	Every second month, on the last Friday of the month
RecursWeekly	RecurrenceInterval RecurrenceDayOfWeekMask	Every three weeks on Wednesday and Friday
RecursYearly	RecurrenceDayOfMonth RecurrenceMonthOfYear	Every March on the twenty-sixth day of the month
RecursYearlyNth	RecurrenceDayOfWeekMask RecurrenceInstanceRecurrenceMonthOfYear	The first Saturday in every October

JunctionIdList

To create an event using `JuncionIdList`, IDs are pulled from the related contacts and both the event and the `EventRelation` records are created in one API call. If the `EventRelation` fails, the event is rolled back because it's all done in a single API call.

```
public void createEventNew(Contact[] contacts) {
 String[] contactIds = new String[contacts.size()];
 for (int i = 0; i < contacts.size(); i++) {
  contactIds[i] = contacts[i].getID();
 }
 Event event = new Event();
 event.setSubject("New Event");
 event.setEventWhoIds(contactIds);
 SaveResult[] results = null;
 try {
  results = connection.create(new Event[] {
   task
  });
 } catch (ConnectionException ce) {
  ce.printStackTrace();
 }
}
```

SEE ALSO:

Archived Activities

Object Basics

EventFeed

Represents a single feed item in the feed on an Event. This object is available in API version 20.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of EventFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the

Field	Details
	PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int

Field	Details
	Properties Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the event record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference

Field	Details
	Properties Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed.

Field	Details
	• `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for an event record. You can only delete a feed if you created it, or if you have the "Modify All Data" permission.

EventLogFile

Represents event log files for event monitoring. The event monitoring product gathers information about your Salesforce org's operational events, which you can use to analyze usage trends and user behavior. This object is available in API version 32.0 and later. The `Interval` and `Sequence` fields are available only in API version 37.0 and later.

You can interact with event monitoring data by querying fields on the EventLogFile object (like `EventType` and `LogDate`). `CreatedDate` tracks when the log file was generated. To view the underlying event data, query the `LogFile` field. The `EventType` determines the schema of this field. For more information, see EventLogFile Supported Event Types.

> Note: Log data schema for each `EventType` can change. With each new release, use the `LogFileFieldNames` and `LogFileFieldTypes` fields to validate the schema changes. In the unlikely case in which no log files are generated for 24 hours, contact Salesforce Customer Support.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Special Access Rules

Accessing this object requires View Event Log Files and API Enabled user permissions. Users with View All Data permission can view event log files.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`EventType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The event type—API, Login, Report, URI, and so forth. Use to determine which files were generated for your org. For the corresponding `LogFile` schema, see EventLogFile Supported Event Types.
`Interval`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The generation schedule for the event log file. Possible values are: • `Daily` • `Hourly` This field is available in API version 37.0 and later.
`LogDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date and time of the log file's creation. For daily event log files, tracks usage activity for a 24-hour period, from 12:00 a.m. to 11:59 p.m. UTC time. For hourly event log files, indicates the hour in which the log file was generated. For example, for events that occur between 11:00 AM and 12:00 PM on 3/7/2016, this field's value is 2016-03-07T11:00:00.000Z. Note: For hourly event log files, we recommend using `CreatedDate` to query the date and time that an EventLogFile object was created.
`LogFile`	**Type** base64 **Description** Encoded file data in `.csv` format. The `EventType` field defines the schema for this data.
`LogFileContentType`	**Type** string **Properties** Filter, Group, Sort **Description** The content type of the log file; always `.csv`.
`LogFileFieldNames`	**Type** string **Properties** Nillable **Description** The ordered list of fields in the log file data. Note: `LogFileFieldNames` and `LogFileFieldTypes` are specific to each `EventType`. For example, `LogFileFieldNames` has a different value for an API `EventType` and a Login `EventType`.

Field	Details
LogFileFieldTypes	**Type** string **Properties** Nillable **Description** The ordered list of field types in the log file data (String, Id, and so forth). Note: LogFileFieldNames and LogFileFieldTypes are specific to each EventType. For example, LogFileFieldTypes has a different value for an API EventType and a Login EventType.
LogFileLength	**Type** double **Properties** Filter, Sort **Description** The log file length in bytes. You can use this field to plan storage needs for your log files.
Sequence	**Type** int **Properties** Filter, Group, Sort **Description** The number for the portion of the event log file data captured in an hour. For 24-hour event log file generation, the value of this field is 0. For hourly event log files, the initial value is 1 and increases by 1 when events are added in the same hour after the latest event log file is created. The value resets to 1 in the subsequent hour. For example, you have activity between 2:00 and 3:00 PM. Two log files are generated that contain the event log data for that hour, with Sequence values of 1 and 2. For event log data that occurs at 3:01 PM, the Sequence value resets to 1. This field is available in API version 37.0 and later.

EventLogFile Supported Event Types
The EventType field in the EventLogFile object supports these events. Some common fields, such as CPU_TIME and RUN_TIME, can have null or zero values depending on how the events are generated for a given feature.

EventLogFile Supported Event Types

The EventType field in the EventLogFile object supports these events. Some common fields, such as CPU_TIME and RUN_TIME, can have null or zero values depending on how the events are generated for a given feature.

Note: The Insecure External Assets, Login, and Logout events are available in supported Salesforce editions at no additional cost. Contact Salesforce to purchase the remaining event types.

Apex Callout Event Type

Apex Callout events contain details about callouts (external requests) during Apex code execution.

Apex Execution Event Type

Apex Execution events contain details about Apex classes that are used.

Apex SOAP Event Type

Apex SOAP events contain details about Web Services API calls.

Apex Trigger Event Type

Apex Trigger events contain details about triggers that fire in an organization.

API Event Type

API events contain details about your organization's web services API activity.

Asynchronous Report Run Event Type

Asynchronous Report Run events are created for reporting requests that are scheduled. This category includes dashboard refreshes, asynchronous reports, schedule reports, and analytics snapshots.

Bulk API Event Type

Bulk API events contain details about Bulk API requests.

Change Set Operation Event Type

Change Set Operation events contain information from change set migrations.

Console Event Type

Console events contain information about the performance and use of Salesforce Consoles. The Console events are logged whenever a Console tab is opened with a sidebar component. Outside of that, when Console tabs are opened, a regular view record detail event is served just like in Salesforce Classic.

Content Distribution Event Type

Content Distribution events contain information about content distributions and deliveries to users.

Content Document Link Event Type

Content Document Link events contain sharing information for content documents.

Content Transfer Event Type

Content Transfer events contain information about content transfer events, such as downloads, uploads, and previews. This information includes events performed on files and attachments to records.

Continuation Callout Summary Event Type

Continuation Callout Summary events contain information about all of the asynchronous callouts performed during a transaction, their response status codes, execution times, and URL endpoint destinations. This event type is available in the EventLogFile object in API version 43.0 and later.

Dashboard Event Type

Dashboard events contain details about dashboards that users view.

Document Attachment Downloads Event Type

Document Attachment Downloads events contain details of document and attachment downloads.

External Cross-Org Callout Event Type

External Cross-Org Callout events represent external data callouts via the cross-org adapter for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

External Custom Apex Callout Event Type

External Custom Apex Callout events represent external data callouts via custom adapters for Salesforce Connect This event type is available in the EventLogFile object in API version 40.0 and later.

External OData Callout Event Type

External OData Callout events represent external data callouts via the OData 2.0 and OData 4.0 adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

Insecure External Assets Event Type

Insecure External Assets events contain information about external assets, such as images or videos, accessed by users over an insecure HTTP protocol. The event lists all your Salesforce pages that contain insecure assets hosted on third-party sites that your users loaded with a Chrome, Firefox, Microsoft Edge, or Safari browser. This event type is available in the EventLogFile object in API version 42.0 and later.

Knowledge Article View Event Type

Knowledge Article View events contain user activity with your knowledge base.

Lightning Error Event Type

Lightning Error events represent errors that occurred during user interactions with Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Interaction Event Type

Lightning Interaction events track user interactions with Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Page View Event Type

Lightning Page View events represent information about the page on which the event occurred in Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

Lightning Performance Event Type

Lightning Performance events track trends in your Lightning Experience performance. This event type is available in the EventLogFile object in API version 39.0 and later.

Login Event Type

Login events contain details about your org's user login history.

Login As Event Type

Login As events contain details about what a Salesforce admin did while logged in as another user.

Logout Event Type

Logout events contain details of user logouts.

Metadata API Operation Event Type

Metadata API Operation events contain details of Metadata API retrieval and deployment requests.

Multiblock Report Event Type

Multiblock Report events contain details about Joined Report reports.

Package Install Event Type

Package Install events contain details about package installation in the organization.

Platform Encryption Event Type

Platform Encryption event contains information about tenant secret and derived encryption key usage. This event type is available in API versions 41.0 and later.

Queued Execution Event Type

Queued Execution events contain details about queued executions—for example, batch Apex.

Report Event Type

Report events contain information about what happened when a user ran a report.

Report Export Event Type

Report Export events contain details about reports that a user exported.

REST API Event Type

REST API events contain details about REST-specific requests.

Sandbox Event Type

Sandbox events contain details about sandbox copies.

Search Event Type

Search events contain details about the user's search query. All searches within the app, including Communities, are included. However, unauthenticated users won't have a unique Salesforce user ID.

Search Click Event Type

Search Click events contain details about the user's interaction with the search results. All searches within the app, including Communities, are included. However, unauthenticated users won't have a unique Salesforce user ID.

Sites Event Type

Sites events contain details of Site.com requests. Requests can originate from the browser (UI).

Time-Based Workflow Event Type

Time-Based Workflow events contain details about queue activity monitoring.

Transaction Security Event Type

Transaction Security events contain details about policy execution.

URI Event Type

URI events contain details about user interaction with the web browser UI.

Visualforce Event Type

Visualforce events contain details of Visualforce requests. Requests can originate from the browser (UI).

Wave Change Event Type

Wave Change events represent route or page changes made in the Salesforce Analytics user interface.

Wave Interaction Event Type

Wave Interaction events track user interactions with the Analytics user interface made via the browser.

Wave Performance Event Type

Wave Performance events help you track trends in your Analytics performance.

SEE ALSO:

EventLogFile

Apex Callout Event Type

Apex Callout events contain details about callouts (external requests) during Apex code execution.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`METHOD`	**Type** String **Description** The HTTP method of the callout. **Example** `GET`, `POST`, `PUT`, and so on.
`ORGANIZATION_ID`	**Type** Id

	Description The 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
REQUEST_SIZE	**Type** Number **Description** The size of the callout request body, in bytes.
RESPONSE_SIZE	**Type** Number **Description** The size of the callout response, in bytes.
RUN_TIME	**Type** Number **Description** Not used for this event type. Use the TIME field instead.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
SUCCESS	**Type** Boolean **Description** 1 if the request was successful, and 0 if not.

`TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds (ms).
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TYPE`	**Type** String **Description** The type of Apex callout. **Example** REST or AJAX
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`URL`	**Type** String

Field	Details
	Description The callout endpoint URL. **Example** `www.salesforce.com`
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex Execution Event Type

Apex Execution events contain details about Apex classes that are used.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CALLOUT_TIME`	**Type** Number **Description** The execution time of the external Apex calls.
`CLIENT_IP`	**Type** String

Field	Details
	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTRY_POINT`	**Type** String **Description** The entry point for this Apex execution. **Example** • `GeneralCloner.cloneAndInsertRecords` • `VF- /apex/CloneUser`
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`EXEC_TIME`	**Type** Number **Description** The end-to-end Apex execution time.

`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NUMBER_SOQL_QUERIES`	**Type** Number **Description** The number of SOQL queries that were executed during the event.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`QUIDDITY`	**Type** String **Description** The type of outer execution associated with this event. **Example** • `A`–Old Batch • `C`–Scheduled Apex • `E`–Inbound Email Service • `F`–Future • `H`–Apex REST • `I`–Invocable Action • `K`–Quick Action • `L`–Aura • `M`–Remote Action • `P`–Parallel Batch Apex • `Q`–Queuable • `R`–Synchronous • `S`–Serial Batch Apex • `T`–Apex Tests

	• `V`–Visualforce • `W`–SOAP Webservices • `X`–Execute Anonymous
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String

Field	Details
	Description The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Apex SOAP Event Type

Apex SOAP events contain details about Web Services API calls.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLASS_NAME`	**Type** String

	Description The Apex class name. If the class is part of a managed package, this string includes the package namespace.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CLIENT_NAME`	**Type** String **Description** The name of the client that's using Salesforce services. This field is an optional parameter that can be passed in API calls. If blank, the caller didn't specify a client in the CallOptions header.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.

LIMIT_USAGE_PERCENT	**Type** Number **Description** The percentage of Apex SOAP calls that were made against the organization's limit.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
METHOD_NAME	**Type** String **Description** The name of the calling Apex method.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
QUERY	**Type** String **Description** The SOQL query, if one was performed.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
REQUEST_STATUS	**Type** String

Field	Details
	Description The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String

	Description The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Apex Trigger Event Type

Apex Trigger events contain details about triggers that fire in an organization.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String

Field	Details
	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTITY_NAME`	**Type** String **Description** The name of the object affected by the trigger.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`EXEC_TIME`	**Type** Number **Description** The end-to-end Apex execution time.
`LOGIN_KEY`	**Type** String

Field	Details
	Description The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String

	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TRIGGER_ID`	**Type** String **Description** The 15-character ID of the trigger that was fired.
`TRIGGER_NAME`	**Type** String **Description** The name of the trigger that was fired.
`TRIGGER_TYPE`	**Type** String **Description** The type of this trigger. **Possible Values** • AfterInsert • AfterUpdate • BeforeInsert • BeforeUpdate

URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

API Event Type

API events contain details about your organization's web services API activity.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

`API_TYPE`	**Type** String **Description** The type of API request. **Possible Values** • `D`: Apex Class • `E`: SOAP Enterprise • `I`: SOAP Cross Instance • `M`: SOAP Metadata • `O`: Old SOAP • `P`: SOAP Partner • `S`: SOAP Apex • `T`: SOAP Tooling • `X`: XmlRPC • `f`: Feed • `l`: Live Agent • `p`: SOAP ClientSync
`API_VERSION`	**Type** String **Description** The version of the API that's being used. **Example** 36.0
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CLIENT_NAME`	**Type** String **Description** The name of the client that's using Salesforce services. This field is an optional parameter that can be passed in API calls. If blank, the caller didn't specify a client in the CallOptions header.

`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTITY_NAME`	**Type** Set **Description** API objects that are accessed. **Example** Account, Opportunity, Contact, and so on.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String

	Description The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`METHOD_NAME`	**Type** String **Description** The name of the calling Apex method.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_SIZE`	**Type** Number **Description** The size of the callout request body, in bytes.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error

	- `R`: Redirect - `N`: Not Found
`RESPONSE_SIZE`	**Type** Number **Description** The size of the callout response, in bytes.
`ROWS_PROCESSED`	**Type** Number **Description** The number of rows that were processed in the request. **Example** 150
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`

`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Asynchronous Report Run Event Type

Asynchronous Report Run events are created for reporting requests that are scheduled. This category includes dashboard refreshes, asynchronous reports, schedule reports, and analytics snapshots.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

AVERAGE_ROW_SIZE	**Type** Number **Description** The average row size of all rows in the Asynchronous Report Run event, in bytes. A large average size, coupled with a high ROW_COUNT, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 700
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
DASHBOARD_ID	**Type** String **Description** The 15-character ID of the dashboard that was run.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
DB_BLOCKS	**Type** Number

	Description Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DISPLAY_TYPE`	**Type** String **Description** The report display type, indicating the run mode of the report. **Possible Values** • `D`: Dashboard • `S`: Show Details • `H`: Hide Details
`ENTITY_NAME`	**Type** String **Description** The name of the object affected by the trigger.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NUMBER_BUCKETS`	**Type** Number

Field	Details
	Description The number of buckets that were used in the report.
NUMBER_COLUMNS	**Type** Number **Description** The number of columns in the report.
NUMBER_EXCEPTION_FILTERS	**Type** Number **Description** The number of exception filters that are used in the report.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
RENDERING_TYPE	**Type** String **Description** The report rendering type, describing the format of the report output. **Possible Values** • `W`: Web (HTML) • `E`: Email • `P`: Printable • `X`: Excel • `C`: Comma-separated values (CSV) • `J`: JavaScript Object Notation (JSON)
REPORT_ID	**Type** Id **Description** The 15-character ID of the report that was run.
REPORT_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the report that was run.

REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • S: Success • F: Failure • U: Undefined • A: Authorization Error • R: Redirect • N: Not Found
ROW_COUNT	**Type** Number **Description** The number of rows that were processed in the Asynchronous Report Run event. High row counts, coupled with a high AVERAGE_ROW_SIZE, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 150
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String

Field	Details
	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`SORT`	**Type** String **Description** The sort column and order that was used in the report.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id

	Description The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Bulk API Event Type

Bulk API events contain details about Bulk API requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`BATCH_ID`	**Type** String **Description** The 15-character ID of the Bulk API batch.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number

Field	Details
	Description The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`ENTITY_TYPE`	**Type** String **Description** The type of entity that the Bulk API used.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`JOB_ID`	**Type** String **Description** The 15-character ID of the Bulk API job.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`MESSAGE`	**Type** EscapedString **Description** Any success or error message that's associated with the request.
`NUMBER_FAILURES`	**Type** Number **Description** The number of failures that were returned with the request.

OPERATION_TYPE	**Type** String **Description** The type of Bulk API operation that was performed.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
ROWS_PROCESSED	**Type** Number **Description** The number of rows that were processed in the request. **Example** 150
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD

`SUCCESS`	**Type** Boolean **Description** Whether the batch was successful.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id

Field	Details
	Description The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Change Set Operation Event Type

Change Set Operation events contain information from change set migrations.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CHANGE_SET_NAME`	**Type** String **Description** The name of the change set.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String

	Description The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`OPERATION`	**Type** String **Description** The operation that's being performed. **Possible Values** • DELETE • DEPLOY • UPLOAD • VALIDATE
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number

	Description The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TARGET_ORG_ID`	**Type** Id **Description** The 15-character ID of the organization that's receiving the change set.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID

Field	Details
	Description The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Console Event Type

Console events contain information about the performance and use of Salesforce Consoles. The Console events are logged whenever a Console tab is opened with a sidebar component. Outside of that, when Console tabs are opened, a regular view record detail event is served just like in Salesforce Classic.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26

COMPONENT_ID	**Type** Id **Description** The 15-character ID of the component.
COMPONENT_ID_DERIVED	**Type** Id **Description** The 18-character, case-insensitive ID of the component.
CONSOLE_ID	**Type** Id **Description** The 15-character ID of the console.
CONSOLE_ID_DERIVED	**Type** Id **Description** The 18-character, case-insensitive ID of the console.
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String **Description** The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.

`LICENSE_CONTEXT`	**Type** String **Description** The license context in which a user is using a console. **Example** service, salesandservice, sales
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`RECORD_ID`	**Type** Id **Description** The 15-character ID of the record that's associated with the console.
`RECORD_ID_DERIVED`	**Type** Id **Description** The 18-character, case-insensitive ID of the record that's associated with the console.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV

`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`

Field	Details
URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Content Distribution Event Type

Content Distribution events contain information about content distributions and deliveries to users.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

ACTION	**Type** String **Description** The action that's used when a delivery is viewed. **Possible Values** • VIEW • INSERT • UPDATE
DELIVERY_ID	**Type** Id **Description** The 15-character ID of the content delivery.
DELIVERY_LOCATION	**Type** String **Description** The location of the delivery.
EVENT_TYPE	**Type** String **Description** The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
RELATED_ENTITY_ID	**Type** Id **Description** The 15-character ID of the record that's associated with the delivery distribution.
REQUEST_ID	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`
`VERSION_ID`	**Type** Id

	Description The 15-character ID of the content version.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Content Document Link Event Type

Content Document Link events contain sharing information for content documents.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
DOCUMENT_ID	**Type** Id **Description** The 15-character ID of the document that's being shared.
EVENT_TYPE	**Type** String **Description** The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID.

Field	Details
	Example 3nWgxWbDKWWDIk0FKfF5DV
`SHARED_WITH_ENTITY_ID`	**Type** Id **Description** Who the document was shared with.
`SHARING_OPERATION`	**Type** String **Description** The type of sharing operation on the document. **Possible Values** • `INSERT` • `UPDATE` • `DELETE`
`SHARING_PERMISSION`	**Type** String **Description** What permissions the document was shared with. **Possible Values** • `V`: Viewer • `C`: Collaborator • `I`: Inferred—that is, the sharing permissions were inferred from a relationship between the viewer and document. For example, a document's owner has a sharing permission to the document itself. Or, a document can be a part of a content collection, and the viewer has sharing permissions to the collection rather than explicit permissions to the document directly.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Content Transfer Event Type

Content Transfer events contain information about content transfer events, such as downloads, uploads, and previews. This information includes events performed on files and attachments to records.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`DOCUMENT_ID`	**Type** Id **Description** The 15-character ID of the document that's being shared.
`DOCUMENT_ID_DERIVED`	**Type** Id

	Description The 18-character case insensitive ID of the document that's being shared.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`FILE_PREVIEW_TYPE`	**Type** String **Description** The content type of the file version.
`FILE_TYPE`	**Type** String **Description** The content type of the file preview.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SIZE_BYTES`	**Type** Number **Description** The size of the file transfer, in bytes.

`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TRANSACTION_TYPE`	**Type** String **Description** The operation that was performed, including operations on files and attachments to records. For example, you can track operations in the Attachments related list on a case. **Possible Values** • `VersionDownloadAction` and `VersionDownloadApi` represent downloads via the user interface and API respectively. • `VersionRenditionDownload` represents a file preview action. • `saveVersion` represents a file that's being uploaded.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

	Example 005900000001I1SNIA0
VERSION_ID	**Type** Id **Description** The 15-character ID of the content version.
VERSION_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the content version.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Continuation Callout Summary Event Type

Continuation Callout Summary events contain information about all of the asynchronous callouts performed during a transaction, their response status codes, execution times, and URL endpoint destinations. This event type is available in the EventLogFile object in API version 43.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
CONTINUATION_ID	**Type** String **Description** A unique ID identifying a sequence of events within a request. **Example** SFDC-Continuation-14e3cg85-961d-389e-7bz1-3d171543162a
DURATION	**Type** Number **Description** Total duration of continuation, in milliseconds.
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
ORIGIN_REQUEST_ID	**Type** Id **Description** The ID of the request that initiated a callout. **Example** TID:5ILoVKlztX_rDDJcp7
REQUEST_FORM_SIZE	**Type** String **Description** Continuation request form size, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RESPONSE_SIZE	**Type** String **Description** The size of the callout response, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.
STATUS_CODE	**Type** String

Field	Details
	Description The HTTP status or internal code returned by the remote endpoint. A status code of 200 indicates that the request was successful. Other status code values indicate the type of problem that was encountered. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values. **Examples** • 2000—The timeout was reached, and the server didn't get a chance to respond. • 2001—There was a connection failure. • 2002—Exceptions occurred. • 2003—The response hasn't arrived (which also means that the Apex asynchronous callout framework hasn't resumed). • 2004—The response size is too large (greater than 1 MB).
`SUCCESS`	**Type** Boolean **Description** Indicates whether the continuation was successful (`1`) or not (`0`).
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URL`	**Type** String **Description** The callout endpoint URL. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values. **Example** http://prod.location.amazonaws.com:1000/orders/order/_search

Field	Details
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
VF_CONTROLLER_SIZE	**Type** String **Description** Continuation Visualforce controller size, in bytes. Depending on how many HTTP requests were used in a continuation, this field can contain up to three space-separated values.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Dashboard Event Type

Dashboard events contain details about dashboards that users view.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP".

	Example 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DASHBOARD_COMPONENT_ID`	**Type** Id **Description** The 15-character ID of the dashboard component.
`DASHBOARD_ID`	**Type** String **Description** The 15-character ID of the dashboard that was run.
`DASHBOARD_ID_DERIVED`	**Type** String **Description** The 18-character case insensitive ID of the dashboard that was run.
`DASHBOARD_TYPE`	**Type** String **Description** The type of dashboard. **Possible Values** • `R`: Run as running user • `C`: Run as context user • `S`: Run as specific user
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.

`IS_SCHEDULED`	**Type** Boolean **Description** The value is `true` if the dashboard is a scheduled dashboard.
`IS_SUCCESS`	**Type** Boolean **Description** 1 if the dashboard component ran successfully, 0 if it didn't.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REPORT_ID`	**Type** Id **Description** The 15-character ID of the report that was run.
`REPORT_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the report that was run.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

Field	Details
	Example 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID

Field	Details
	Description The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Document Attachment Downloads Event Type

Document Attachment Downloads events contain details of document and attachment downloads.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`ENTITY_ID`	**Type** Id **Description** The 15-character ID of the entity that's associated with the document or attachment.
`EVENT_TYPE`	**Type** String **Description** The type of event.

	Example `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`FILE_TYPE`	**Type** String **Description** The type of the file or attachment.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`USER_ID`	**Type** Id

Field	Details
	Description The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `0059000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

External Cross-Org Callout Event Type

External Cross-Org Callout events represent external data callouts via the cross-org adapter for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Note: For the cross-org adapter for Salesforce Connect, event monitoring currently doesn't track search callouts.

Fields

Field	Details
`ACTION`	**Type** String **Description** Action performed by the callout. **Possible Values** • query • upsert • delete
`ENTITY`	**Type** String

Field	Details
	Description Name of the external object being accessed. **Example** Order
`EVENT_TYPE`	**Type** String **Description** Type of event. Value is always ExternalCrossOrgCallout.
`EXECUTE_MS`	**Type** Number **Description** How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 1
`FETCH_MS`	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later. **Example** 452
`FILTER`	**Type** Text **Description** Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries. **Example** WHERE CustomerId='123456'
`HAVING`	**Type** Text **Description** Reserved for future use.
`LIMIT`	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries.

Field	Details
	Example 200
`MESSAGE`	**Type** String **Description** Error or warning message associated with the failed query callout. Value is always empty for upsert and delete callouts. **Example** System.UnexpectedException: Query is either selecting too many fields or the filter conditions are too complicated
`OFFSET`	**Type** Number **Description** Number of rows to skip when paging through a result set. Corresponds to `OFFSET` in SOQL queries. If a SOQL query doesn't define an `OFFSET`, the value is -1. **Example** 0 (default)
`ORDERBY`	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries. **Examples** • ORDER BY ShipName • ORDER BY ShipName DESC
`ORGANIZATION_ID`	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID.

Field	Details
	Example 4A13-HSKv3CKs-0FKfceaV
`ROWS`	**Type** Number **Description** Total number of records in the result set. Value is always 0 for upsert and delete callouts. **Example** 200
`ROWS_FETCHED`	**Type** Number **Description** Reserved for future use.
`SELECT`	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries. **Example** SELECT Id,Name,CustomerID,OrderDate
`STATUS`	**Type** Boolean **Description** Whether the query was successful. Value is always empty for upsert and delete callouts. **Possible Values** • 1—Success • 0—Failed
`SUBQUERIES`	**Type** Number **Description** The number of subqueries that the query is split into.
`THROUGHPUT`	**Type** Number **Description** Reserved for future use.

Field	Details
TIMESTAMP	**Type** String **Description** When the event occurred. **Example** 20150101000000.000
TIMESTAMP_DERIVED	**Type** DateTime **Description** When the event occurred in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). **Example** 2015-07-27T11:32:59.555Z
TOTAL_MS	**Type** Number **Description** How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results. **Example** 453
USER_ID	**Type** Id **Description** 15-character ID of the user accessing the external system. **Example** 00530000009M943
USING_MRU	**Type** Boolean **Description** Reserved for future use.

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

External Custom Apex Callout Event Type

External Custom Apex Callout events represent external data callouts via custom adapters for Salesforce Connect This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Fields

Field	Details
ACTION	**Type** String **Description** Action performed by the callout. **Possible Values** • query • upsert • delete
ENTITY	**Type** String **Description** Name of the external object being accessed. **Example** Order
EVENT_TYPE	**Type** String **Description** Type of event. Value is always ExternalCustomApexCallout.
EXECUTE_MS	**Type** Number **Description** How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 102
FETCH_MS	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later.

Field	Details
	Example 607
`FILTER`	**Type** Text **Description** Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries. **Example** Filter:[columnName=CustomerID, columnValue=537, subfilters=null, tableName=Order, type=EQUALS]
`LIMIT`	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries. **Example** 200
`MESSAGE`	**Type** String **Description** Error or warning message associated with the failed call. **Example** System.UnexpectedException: Query is either selecting too many fields or the filter conditions are too complicated
`OFFSET`	**Type** Number **Description** Number of rows to skip when paging through a result set. Corresponds to `OFFSET` in SOQL queries. **Example** 0 (default)
`ORDERBY`	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries. **Examples** (Order:[columnName=OrderDate, direction=ASCENDING, tableName=Order])

Field	Details
ORGANIZATION_ID	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID. **Example** 4A13-HSKv3CKs-0FKfceaV
ROWS	**Type** Number **Description** Total number of records in the result set. The value is always -1 if the custom adapter's `DataSource.Provider` class doesn't declare the `QUERY_TOTAL_SIZE` capability. **Example** 200
ROWS_FETCHED	**Type** Number **Description** Number of rows fetched by the callout. Available in API version 42.0 and later. **Example** 200
SELECT	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries. **Example** (ColumnSelection:[aggregation=NONE, columnName=Name, tableName=Order], ColumnSelection:[aggregation=NONE, columnName=CustomerID, tableName=Order], ColumnSelection:[aggregation=NONE, columnName=OrderDate, tableName=Order])
STATUS	**Type** Boolean

Field	Details
	Description Whether the query was successful. **Possible Values** • 1—Success • 0—Failed • Empty—Failed with no logged status or message
THROUGHPUT	**Type** Number **Description** Number of records retrieved in one second. **Example** 302.57
TIMESTAMP	**Type** String **Description** When the event occurred. **Example** 20150101000000.000
SUBQUERIES	**Type** Number **Description** Reserved for future use.
TIMESTAMP_DERIVED	**Type** DateTime **Description** When the event occurred in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). **Example** 2015-07-27T11:32:59.555Z
TOTAL_MS	**Type** Number **Description** How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results. **Example** 709

Field	Details
USER_ID	**Type** Id **Description** 15-character ID of the user accessing the external system. **Example** 00530000009M943

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

External OData Callout Event Type

External OData Callout events represent external data callouts via the OData 2.0 and OData 4.0 adapters for Salesforce Connect. This event type is available in the EventLogFile object in API version 40.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer Guide.

Fields

Field	Details
ACTION	**Type** String **Description** Action performed by the callout. **Possible Values** • query • upsert • delete
BYTES	**Type** Number **Description** Size of the result set in bytes.
ENTITY	**Type** String **Description** Name of the external object being accessed.

Field	Details
	Example Order
`EVENT_TYPE`	**Type** String **Description** Type of event. Value is always ExternalODataCallout.
`EXECUTE_MS`	**Type** Number **Description** How long it took (in milliseconds) for Salesforce to prepare and execute the query. Available in API version 42.0 and later. **Example** 21
`EXPAND`	**Type** String **Description** Reserved for future use.
`FETCH_MS`	**Type** Number **Description** How long it took (in milliseconds) to retrieve the query results from the external system. Available in API version 42.0 and later. **Example** 127
`FILTER`	**Type** Text **Description** Field expressions to filter which rows to return. Corresponds to `WHERE` in SOQL queries and `$filter` in OData queries. **Example** CustomerID eq 12345
`LIBRARY`	**Type** String **Description** Reserved for future use.

Field	Details
LIMIT	**Type** Number **Description** Maximum number of rows to return for a query. Corresponds to `LIMIT` in SOQL queries and `$top` in OData queries. **Example** 200
MESSAGE	**Type** String **Description** Error or warning message associated with the failed call. **Example** The OData query result was too large, so the external data didn't load.
NEXT_LINK	**Type** String **Description** OData next link that the callout used to request a subsequent page of rows. A next link is provided in a previous response from the OData producer when the response includes only part of the result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** http://services.example.org/Warehouse.svc/Orders?$count=true&$select=CustomerID,OrderID,RequiredDate,ShippedDate&$top=301&$skiptoken=10447
OFFSET	**Type** Number **Description** Number of rows to skip when paging through a result set. Corresponds to `OFFSET` in SOQL queries and `$skip` in OData queries. **Example** 10
ORDERBY	**Type** String **Description** Field or column to use for sorting query results, and whether to sort the results in ascending (default) or descending order. Corresponds to `ORDER BY` in SOQL queries and `$orderby` in OData queries.

Field	Details
	Examples • ShipName • ShipName desc
ORGANIZATION_ID	**Type** Id **Description** 15-character ID of the organization. **Example** 00D000000000123
PARENT_CALLOUT	**Type** String **Description** If the callout requested a subsequent page of rows, this field identifies the initial callout whose request resulted in the multi-page result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 4EoZtuBzzRIXSk-ysRdf1F-1
PROVIDER_TYPE	**Type** String **Description** Whether the OData 2.0 or OData 4.0 adapter made the callout. **Possible Values** • OData—OData 2.0 adapter • OData4—OData 4.0 adapter
RATE_LIMIT_USAGE_PERCENT	**Type** Number **Description** Consumed percentage of the org's limit of OData callouts per hour. **Example** 2.5—2.5% of the hourly callout limit has been consumed
REQUEST_ID	**Type** String **Description** Unique ID of a transaction. A transaction can contain one or more events. All events in a transaction have the same REQUEST_ID.

Field	Details
	Example 4A13-HSKv3CKs-0FKfceaV
`REQUESTS`	**Type** Number **Description** Reserved for future use.
`ROWS`	**Type** Number **Description** Total number of records in the result set. Available in API version 42.0 and later. **Example** 830
`ROWS_FETCHED`	**Type** Number **Description** Number of records fetched by the callout. The records fetched by a callout can be a subset of a large result set. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 200
`SEARCH`	**Type** String **Description** Search query string. Corresponds to condition expressions in SOSL. **Example** contains(CustomerID,'10248') eq true or contains(ShipName,'10248') eq true
`SELECT`	**Type** String **Description** Comma-separated list of fields being queried. Corresponds to `SELECT` in SOQL queries and `$select` in OData queries. **Example** CustomerID,OrderDate,OrderID,ShipCity,ShipCountry
`STATUS`	**Type** Boolean

Field	Details
	Description Whether the query was successful. **Possible Values** • 1—Success • 0—Failed
THROUGHPUT	**Type** Number **Description** Number of records retrieved in one second. Available in API version 42.0 and later. However, this field isn't supported for the OData 2.0 adapter on orgs created before Spring '18. **Example** 3025.67
TIMESTAMP	**Type** String **Description** When the event occurred. **Example** 20150101000000.000
TIMESTAMP_DERIVED	**Type** DateTime **Description** When the event occurred in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). **Example** 2015-07-27T11:32:59.555Z
TOTAL_MS	**Type** Number **Description** How long it took (in milliseconds) to prepare and execute the query and to retrieve the query results.
USER_ID	**Type** Id **Description** 15-character ID of the user accessing the external system.

Field	Details
	Example 00530000009M943

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Insecure External Assets Event Type

Insecure External Assets events contain information about external assets, such as images or videos, accessed by users over an insecure HTTP protocol. The event lists all your Salesforce pages that contain insecure assets hosted on third-party sites that your users loaded with a Chrome, Firefox, Microsoft Edge, or Safari browser. This event type is available in the EventLogFile object in API version 42.0 and later.

Assets over HTTP can be manipulated through man-in-the-middle and other types of attacks. The attacks can trick users into sending their Salesforce credentials to malicious sites. We recommend that you use HTTPS in your custom code and templates for any asset you're loading from external sites.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
`ASSET_TYPE`	**Type** String **Description** Type of insecure asset. **Possible Values** • `Base URI` • `Connect` • `Font` • `Frame Ancestor`: External page that embeds the Salesforce page in an iframe • `Frame` • `Image` • `Media` • `Object` • `Other` • `Plugin Types` • `Script` • `Style`

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DOCUMENT_URI`	**Type** String **Description** URL of the page that contains the insecure asset, excluding the query parameter. **Example** https://company.my.salesforce.com/00XXXXXXXXX
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`INSECURE_URI`	**Type** String **Description** Insecure external asset URL. **Example** http://pbs.twimg.com/profile_images/5699091412070816/Z4Stwts_normal.jpeg
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring.

Field	Details
	Example GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime

Field	Details
	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TYPE`	**Type** String **Description** Type of Salesforce page. **Possible Values** • `Appserver`: Page without My Domain subdomain (for example, https://na44.salesforce.com) • `Communities`: Customer community • `Email`: Email preview • `Login`: Login page (for example, https://login.salesforce.com) • `Mydomain`: Page on My Domain subdomain (for example, https://mycompany.my.salesforce.com) • `Sites`: Customer site • `Static`: Static content (for example, https://sfdcstatic.com) • `Unknown`: other type of page
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`

Field	Details
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 0059000000I1SNIA0

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Knowledge Article View Event Type

Knowledge Article View events contain user activity with your knowledge base.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ARTICLE_ID	**Type** Id **Description** The 15-character ID of the article. **Example** 00Dxx0000001gEb
ARTICLE_STATUS	**Type** Character **Possible Values** D= Draft O=Online A=Archived
ARTICLE_VERSION	**Type** Number **Description** Article version number

	Example 2
`ARTICLE_VERSION_ID`	**Type** Id **Description** The 15-character ID of the article version. **Example** ka0R00000005rt6

`CONTEXT`	**Type**
	String
	Description
	Context of the request.
	Possible Values
	`Apex`
	`API`
	Empty String

`ENTITY`	**Type** String **Description** Entity requested. **Example** Knowledge__kav
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LANGUAGE`	**Type** String **Description** iso-code of the language **Example** en_US
`LAST_VERSION`	**Type** Boolean

	Description
	true if it is the last version
	Possible Values
	`True`
	`False`

`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SESSION_ID`	**Type** String **Description** Session ID of the request. **Example** gV7pCSW2vGaaJNFi3GSpuPIjNbKVbSxRvx34LJsIvuc=
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`

USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_TYPE	**Type** Character **Description** User type of the request **Possible Values** A = App C =Customer Portal P = Partner Portal G = guest

Lightning Error Event Type

Lightning Error events represent errors that occurred during user interactions with Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
APP_NAME	**Type** String **Description** The name of the application that the user accessed.
BROWSER_NAME	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
BROWSER_VERSION	**Type** String

Field	Details
	Description The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
`CLIENT_ID`	**Type** String **Description** The API client ID.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`COMPONENT_NAME`	**Type** String **Description** The internal name of the component that generated the error. The developer assigned the name when the standard or custom component was created. **Examples** • SaveEdit • Lead.CCPM_sendSMS • ChangeOwnerOne
`CONNECTION_TYPE`	**Type** String **Description** The type of connection. **Possible Values** • `CDMA1x` • `CDMA` • `EDGE` • `EVDO0` • `EVDOA` • `EVDOB` • `GPRS` • `HRPD`

Field	Details
	• HSDPA • HSUPA • LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in name:experience:form format. **Possible Values** Name • APP_BUILDER • CUSTOM • S1 • SFX Experience • BROWSER • HYBRID Form • DESKTOP • PHONE • TABLET
DEVICE_SESSION_ID	**Type** Id

Field	Details
	Description The unique identifier of the user's session based on page load time. If the user reloads a page, it starts a new session. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
EVENT_TYPE	**Type** String **Description** The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
OS_NAME	**Type** String **Description** The operating system name, derived from USER_AGENT. **Example** Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.

Field	Details
PAGE_APP_NAME	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales
PAGE_CONTEXT	**Type** String **Description** Context of the page where the event occurred. **Example** clients:cardsContainer
PAGE_ENTITY_ID	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ
PAGE_ENTITY_TYPE	**Type** String **Description** The entity type of the event. **Example** Task, Account
PAGE_START_TIME	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL.

Field	Details
	Example /sObject/0064100000JXITSAA5/view
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SDK_APP_TYPE`	**Type** String **Description** The mobile SDK application type. **Possible Values** • `HYBRID` • `HYBRIDLOCAL` • `HYBRIDREMOTE` • `NATIVE` • `REACTNATIVE`
`SDK_APP_VERSION`	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
`SDK_VERSION`	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When a user logs out and logs in again, a new session is started.

Field	Details
	Example cdd09305cb6babf34059e27f70e47f1b11dec868
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`UI_EVENT_ID`	**Type** String **Description** ID of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
`UI_EVENT_SEQUENCE_NUM`	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.
`UI_EVENT_SOURCE`	**Type** String **Description** The event source of the error. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates multiple records were read (such as in a list view).

Field	Details
	Examples • click • create • delete • hover • read • update
UI_EVENT_TIMESTAMP	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
UI_EVENT_TYPE	**Type** String **Description** The type of interaction. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
USER_AGENT	**Type** String **Description** The numeric code for the type of client used to make the request (for example, browser, application, or API) as a string.
USER_ID	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	Example 00590000000I1SNIA0
USER_TYPE	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • A: Automated Process • b: High Volume Portal • C: Customer Portal User • D: External Who • F: Self Service • G: Guest • L: Package License Manager • N: Salesforce to Salesforce • n: CSN Only • O: Power Custom • o: Custom • P: Partner • p: Customer Portal Manager • S: Standard • X: Black Tab User

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Lightning Interaction Event Type

Lightning Interaction events track user interactions with Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`APP_NAME`	**Type** String **Description** The name of the application that the user accessed.
`BROWSER_NAME`	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
`BROWSER_VERSION`	**Type** String **Description** The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
`CLIENT_ID`	**Type** String **Description** The API client ID.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`COMPONENT_NAME`	**Type** String **Description** The internal name of the component that the user interacted with. The developer assigned the name when the standard or custom component was created. **Examples** • SaveEdit • Lead.CCPM_sendSMS • ChangeOwnerOne

Field	Details
CONNECTION_TYPE	**Type** String **Description** The type of connection. **Possible Values** • CDMA1x • CDMA • EDGE • EVDO0 • EVDOA • EVDOB • GPRS • HRPD • HSDPA • HSUPA • LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in name:experience:form format. **Possible Values** Name • APP_BUILDER • CUSTOM • S1

Field	Details
	• SFX Experience • BROWSER • HYBRID Form • DESKTOP • PHONE • TABLET
DEVICE_SESSION_ID	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
DURATION	**Type** Number **Description** The duration in milliseconds since the page start time.
EVENT_TYPE	**Type** String **Description** The type of event. **Example** ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
GRANDPARENT_UI_ELEMENT	**Type** String **Description** Grandparent scope of the page element where the event occurred.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring.

Field	Details
	Example GeJCsym5eyvtEK2I
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
OS_NAME	**Type** String **Description** The operating system name, derived from USER_AGENT. **Example** Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.
PAGE_APP_NAME	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales
PAGE_CONTEXT	**Type** String **Description** Context of the page where the event occurred. **Example** clients:cardsContainer
PAGE_ENTITY_ID	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ

Field	Details
PAGE_ENTITY_TYPE	**Type** String **Description** The entity type of the event. **Example** Task, contacts
PAGE_START_TIME	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL. **Example** /sObject/0064100000JXITSAA5/view
PARENT_UI_ELEMENT	**Type** String **Description** Parent scope of the page element where the event occurred.
RECORD_ID	**Type** String array **Description** The IDs of one or more records that the user interacted with. For more information on the user interaction, see UI_EVENT_TYPE and UI_EVENT_SOURCE fields. **Example** ["5004100000JaGGLAA3", "5004100000Dn79CAAR", "50041000007KeugAAC"]
RECORD_TYPE	**Type** String **Description** The type of record object that the user interacted with.

Field	Details
	Examples • Account • Opportunity
RELATED_LIST	**Type** String **Description** The type of related list that the user clicked. **Example** Opportunity
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
SDK_APP_TYPE	**Type** String **Description** The mobile SDK application type. **Possible Values** • HYBRID • HYBRIDLOCAL • HYBRIDREMOTE • NATIVE • REACTNATIVE
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number.

Field	Details
	Example 2.1.0
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
TARGET_UI_ELEMENT	**Type** String **Description** The target page element where the event occurred. **Example** label bBody truncate, tabitem-link
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ) **Example** 2015-07-27T11:32:59.555Z
UI_EVENT_ID	**Type** String **Description** Id of the Lightning event type. **Possible Values** • ltng:error • ltng:interaction

Field	Details
	• `ltng:pageView` • `ltng:performance`
`UI_EVENT_SEQUENCE_NUM`	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.
`UI_EVENT_SOURCE`	**Type** String **Description** The user action on the record or records in `RECORD_ID`. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates multiple records were read (such as in a list view). **Examples** • click • create • delete • hover • read • update
`UI_EVENT_TIMESTAMP`	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
`UI_EVENT_TYPE`	**Type** String **Description** The type of interaction with the records in `RECORD_ID`. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
`USER_AGENT`	**Type** String

Field	Details
	Description The numeric code for the type of client used to make the request (for example, the browser, application, or API) as a string.
`USER_ID`	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
`USER_TYPE`	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who • `F`: Self Service • `G`: Guest • `L`: Package License Manager • `N`: Salesforce to Salesforce • `n`: CSN Only • `O`: Power Custom • `o`: Custom • `P`: Partner • `p`: Customer Portal Manager • `S`: Standard

Field	Details
	• X: Black Tab User

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Lightning Page View Event Type

Lightning Page View events represent information about the page on which the event occurred in Lightning Experience. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
APP_NAME	**Type** String **Description** The name of the application that the user accessed.
BROWSER_NAME	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
BROWSER_VERSION	**Type** String **Description** The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
CLIENT_ID	**Type** String **Description** The API client ID.
CLIENT_IP	**Type** String

Field	Details
	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
CONNECTION_TYPE	**Type** String **Description** The type of connection. **Possible Values** • CDMA1x • CDMA • EDGE • EVDO0 • EVDOA • EVDOB • GPRS • HRPD • HSDPA • HSUPA • LTE • WIFI
DEVICE_ID	**Type** String **Description** The unique identifier used to identify a device when tracking events. DEVICE_ID is a generated value that's created when the mobile app is initially run after installation.
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String

Field	Details
	Description The type of application experience in `name:experience:form` format. **Possible Values** Name • `APP_BUILDER` • `CUSTOM` • `S1` • `SFX` Experience • `BROWSER` • `HYBRID` Form • `DESKTOP` • `PHONE` • `TABLET`
`DEVICE_SESSION_ID`	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
`DURATION`	**Type** Number **Description** The duration in milliseconds since the page start time.
`EFFECTIVE_PAGE_TIME`	**Type** Number **Description** The effective page time, indicating how long it took for the page to load.
`EVENT_TYPE`	**Type** String **Description** The type of event.

Field	Details
	Example ReportExport, URI, API, RestApi, and so on. For details, see EventLogFile Supported Event Types on page 933.
GRANDPARENT_UI_ELEMENT	**Type** String **Description** The grandparent scope of the page element where the event occurred.
LOGIN_KEY	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
ORGANIZATION_ID	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
OS_NAME	**Type** String **Description** The operating system name, derived from USER_AGENT. **Example** Android, iOS, OSX, Windows
OS_VERSION	**Type** String **Description** The operating system version, derived from USER_AGENT.
PAGE_APP_NAME	**Type** String **Description** The internal name of the application that the user accessed from the App Launcher. **Example** LightningSales

Field	Details
PAGE_CONTEXT	**Type** String **Description** The context of the page where the event occurred. **Example** clients:cardsContainer
PAGE_ENTITY_ID	**Type** Id **Description** The unique entity identifier of the event. **Example** 0013000000I3zJAAAZ
PAGE_ENTITY_TYPE	**Type** String **Description** The entity type of the event. **Example** Task, contacts
PAGE_START_TIME	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
PAGE_URL	**Type** String **Description** Relative URL of the top-level Lightning Experience or Salesforce mobile app page that the user opened. The page can contain one or more Lightning components. Multiple record IDs can be associated with PAGE_URL. **Example** /sObject/0064100000JXITSAA5/view
PARENT_UI_ELEMENT	**Type** String **Description** The parent scope of the page element where the event occurred.

Field	Details
PREVPAGE_APP_NAME	**Type** String **Description** The internal name of the previous application that the user accessed from the App Launcher. **Example** LightningSales
PREVPAGE_CONTEXT	**Type** String **Description** The context of the previous page where the event occurred. **Example** clients:cardsContainer
PREVPAGE_ENTITY_ID	**Type** Id **Description** The unique previous page entity identifier of the event.
PREVPAGE_ENTITY_TYPE	**Type** String **Description** The previous page entity type of the event. **Example** Task, contacts
PREVPAGE_URL	**Type** String **Description** The relative URL of the previous Lightning Experience or Salesforce mobile app page that the user opened. **Example** /sObject/006410000
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV

Field	Details
SDK_APP_TYPE	**Type** String **Description** The mobile SDK application type. **Possible Values** • HYBRID • HYBRIDLOCAL • HYBRIDREMOTE • NATIVE • REACTNATIVE
SDK_APP_VERSION	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
SDK_VERSION	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868
TARGET_UI_ELEMENT	**Type** String **Description** The target page element where the event occurred. **Example** label bBody truncate, tabitem-link

Field	Details
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`UI_EVENT_ID`	**Type** String **Description** Id of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
`UI_EVENT_SEQUENCE_NUM`	**Type** Number **Description** An auto-incremented sequence number of the current event since the session started.
`UI_EVENT_SOURCE`	**Type** String **Description** The user action on the record or records. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates multiple records were read (such as in a list view). **Examples** • click • create • delete

Field	Details
	• hover • read • update
`UI_EVENT_TIMESTAMP`	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
`USER_AGENT`	**Type** String **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API) as a string.
`USER_ID`	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
`USER_TYPE`	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API. **Possible Values** • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who

Field	Details
	• F: Self Service • G: Guest • L: Package License Manager • N: Salesforce to Salesforce • n: CSN Only • O: Power Custom • o: Custom • P: Partner • p: Customer Portal Manager • S: Standard • X: Black Tab User

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Lightning Performance Event Type

Lightning Performance events track trends in your Lightning Experience performance. This event type is available in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
APP_NAME	**Type** String **Description** The name of the application that the user accessed.
BROWSER_NAME	**Type** String **Description** The name of the browser that the user accessed. **Example** Chrome, IE, Safari, Gecko
BROWSER_VERSION	**Type** String

Field	Details
	Description The version of the browser that the user accessed in `major.minor version` format. Some browsers don't provide a minor version.
`CLIENT_ID`	**Type** String **Description** The API client ID.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CONNECTION_TYPE`	**Type** String **Description** The type of connection. **Possible Values** • `CDMA1x` • `CDMA` • `EDGE` • `EVDO0` • `EVDOA` • `EVDOB` • `GPRS` • `HRPD` • `HSDPA` • `HSUPA` • `LTE` • `WIFI`
`DEVICE_ID`	**Type** String **Description** The unique identifier used to identify a device when tracking events. `DEVICE_ID` is a generated value that's created when the mobile app is initially run after installation.

Field	Details
DEVICE_MODEL	**Type** String **Description** The name of the device model. **Example** iPad, iPhone
DEVICE_PLATFORM	**Type** String **Description** The type of application experience in `name:experience:form` format. **Possible Values** Name • `APP_BUILDER` • `CUSTOM` • `S1` • `SFX` Experience • `BROWSER` • `HYBRID` Form • `DESKTOP` • `PHONE` • `TABLET`
DEVICE_SESSION_ID	**Type** Id **Description** The unique identifier of the user's session based on page load time. When the user reloads a page, a new session is started. **Example** 321a1ddfaf924803a075f1e69fc87bc06f53ccd0
DURATION	**Type** Number **Description** The duration in milliseconds since the page start time.
EVENT_TYPE	**Type** String

Field	Details
	Description The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** String **Description** The 15-character ID of the org. **Example** 00D000000000123
`OS_NAME`	**Type** String **Description** The operating system name, derived from `USER_AGENT`. **Example** Android, iOS, OSX, Windows
`OS_VERSION`	**Type** String **Description** The operating system version, derived from `USER_AGENT`.
`PAGE_START_TIME`	**Type** Number **Description** The time when the page was initially loaded, measured in milliseconds. **Example** 1471564788642
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SDK_APP_TYPE`	**Type** String **Description** The mobile SDK application type. **Possible Values** • `HYBRID` • `HYBRIDLOCAL` • `HYBRIDREMOTE` • `NATIVE` • `REACTNATIVE`
`SDK_APP_VERSION`	**Type** String **Description** The mobile SDK application version number. **Example** 5.0
`SDK_VERSION`	**Type** String **Description** The mobile SDK version number. **Example** 2.1.0
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all events in Lightning Experience within a session. When the user logs out and logs in again, a new session is started. **Example** cdd09305cb6babf34059e27f70e47f1b11dec868

Field	Details
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
UI_EVENT_ID	**Type** String **Description** Id of the Lightning event type. **Possible Values** • `ltng:error` • `ltng:interaction` • `ltng:pageView` • `ltng:performance`
UI_EVENT_SOURCE	**Type** String **Description** The user action on the record or records. This field's value indicates whether the user's action was on a single record or multiple records. For example, `read` indicates that one record was read (such as on a record detail page); `reads` indicates multiple records were read (such as in a list view). **Examples** • click • create • delete • hover • read • update

Field	Details
UI_EVENT_TIMESTAMP	**Type** Number **Description** The time at which this event occurred, measured in milliseconds. **Example** 1479769912796
UI_EVENT_TYPE	**Type** String **Description** The type of interaction. **Examples** • crud — Created, read, updated, or deleted the record. • reads — Read multiple records.
USER_AGENT	**Type** String **Description** The numeric code for the type of client used to make the request (for example, browser, application, or API) as a string.
USER_ID	**Type** String **Description** The 15-character ID of the user accessing Salesforce services through the UI or API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
USER_TYPE	**Type** String **Description** The category of user license of the user accessing Salesforce services through the UI or API.

Field	Details
	Possible Values • `A`: Automated Process • `b`: High Volume Portal • `C`: Customer Portal User • `D`: External Who • `F`: Self Service • `G`: Guest • `L`: Package License Manager • `N`: Salesforce to Salesforce • `n`: CSN Only • `O`: Power Custom • `o`: Custom • `P`: Partner • `p`: Customer Portal Manager • `S`: Standard • `X`: Black Tab User

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Login Event Type

Login events contain details about your org's user login history.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`API_TYPE`	**Type** String **Description** The type of API request. **Possible Values** • `D`: Apex Class • `E`: SOAP Enterprise • `I`: SOAP Cross Instance

- `M`: SOAP Metadata
- `O`: Old SOAP
- `P`: SOAP Partner
- `S`: SOAP Apex
- `T`: SOAP Tooling
- `X`: XmlRPC
- `f`: Feed
- `l`: Live Agent
- `p`: SOAP ClientSync

`API_VERSION`	**Type** String **Description** The version of the API that's being used. **Example** 36.0
`BROWSER_TYPE`	**Type** String **Description** The browser used for login. **Example Values** • `10011000`: Internet Explorer Desktop 11 • `10011001`: Internet Explorer Mobile 11 • `11035000`: Firefox Desktop 35 • `11035001`: Firefox Mobile 35 • `13050000`: Chrome Desktop 50 • `13050001`: Chrome Mobile 50 • `14012000`: Safari Desktop 12 • `14012001`: Safari Mobile 12
`CIPHER_SUITE`	**Type** String **Description** The TLS cipher suite used for the login. Values are OpenSSL-style cipher suite names, with hyphen delimiters. For more information, see OpenSSL Cryptography and SSL/TLS Toolkit.
`CPU_TIME`	**Type** Number

	Description The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`LOGIN_STATUS`	**Type** String **Description** The status of the login attempt. For successful logins, the value is LOGIN_NO_ERROR. All other values indicate errors or

	authentication issues. For details, see Login Event Type — LOGIN_STATUS Values on page 1052.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started.

Field	Details
	Example d7DEq/ANa7nNZZVD
`SOURCE_IP`	**Type** IP **Description** The source IP of the login request.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TLS_PROTOCOL`	**Type** String **Description** The TLS protocol used for the login. **Example** There are 3 possible values. • 1.0 • 1.1 • 1.2
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID

Field	Details
	Description The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `0059000000I1SNIA0`
`USER_NAME`	**Type** String **Description** The username that's used for login.

Login Event Type — LOGIN_STATUS Values

When users attempt to log in to your org, the success or failure of their login attempts is tracked in event log file data. Specifically, the LOGIN_STATUS field in the Login event type contains the result of these login attempts. The data in LOGIN_STATUS can help you determine whether your users' login attempts were successful. This field is available in the Login event type in the EventLogFile object in API version 39.0 and later.

SEE ALSO:

Login Event Type — LOGIN_STATUS Values
EventLogFile Supported Event Types
EventLogFile

Login Event Type — LOGIN_STATUS Values

When users attempt to log in to your org, the success or failure of their login attempts is tracked in event log file data. Specifically, the LOGIN_STATUS field in the Login event type contains the result of these login attempts. The data in LOGIN_STATUS can help you determine whether your users' login attempts were successful. This field is available in the Login event type in the EventLogFile object in API version 39.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

API Error Code	Details (If Available)
LOGIN_CHALLENGE_ISSUED	Failed: Computer activation required
LOGIN_CHALLENGE_PENDING	Failed: Computer activation pending
LOGIN_DATA_DOWNLOAD_ONLY	
LOGIN_END_SESSION_TXN_SECURITY_POLICY	
LOGIN_ERROR_APPEXCHANGE_DOWN	Unable to process your login request
LOGIN_ERROR_ASYNC_USER_CREATE	
LOGIN_ERROR_AVANTGO_DISABLED	
LOGIN_ERROR_AVANTGO_TRIAL_EXP	
LOGIN_ERROR_CLIENT_NO_ACCESS	
LOGIN_ERROR_CLIENT_REQ_UPDATE	Failed: Client update required
LOGIN_ERROR_CSS_FROZEN	
LOGIN_ERROR_CSS_PW_LOCKOUT	
LOGIN_ERROR_DUPLICATE_USERNAME	
LOGIN_ERROR_EXPORT_RESTRICTED	Restricted country
LOGIN_ERROR_GLOBAL_BLOCK_DOMAIN	Restricted domain
LOGIN_ERROR_HT_DOWN	
LOGIN_ERROR_HTP_METHD_INVALID	Failed: Invalid HTTP method
LOGIN_ERROR_INSECURE_LOGIN	Failed: Login over insecure channel
LOGIN_ERROR_INVALID_GATEWAY	Invalid gateway
LOGIN_ERROR_INVALID_ID_FIELD	
LOGIN_ERROR_INVALID_PASSWORD	Invalid password
LOGIN_ERROR_INVALID_USERNAME	Invalid login
LOGIN_ERROR_LOGINS_EXCEEDED	Maximum logins exceeded
LOGIN_ERROR_MUST_USE_API_TOKEN	Failed: API security token required
LOGIN_ERROR_MUTUAL_AUTHENTICATION	Mutual authentication failed
LOGIN_ERROR_NETWORK_INACTIVE	Invalid - community offline
LOGIN_ERROR_NO_HT_ACCESS	
LOGIN_ERROR_NO_NETWORK_ACCESS	No community access
LOGIN_ERROR_NO_NETWORK_INFO	
LOGIN_ERROR_NO_PORTAL_ACCESS	Invalid profile association

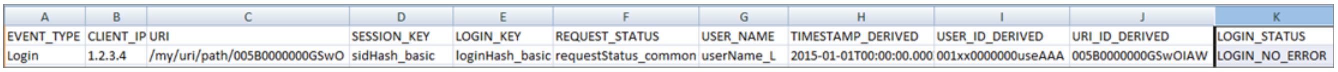
API Error Code	Details (If Available)
LOGIN_ERROR_NO_SET_COOKIES	
LOGIN_ERROR_OFFLINE_DISABLED	Offline disabled
LOGIN_ERROR_OFFLINE_TRIAL_EXP	Offline trial expired
LOGIN_ERROR_ORG_CLOSED	Organization closed
LOGIN_ERROR_ORG_DOMAIN_ONLY	Restricted domain
LOGIN_ERROR_ORG_IN_MAINTENANCE	Organization is in maintenance
LOGIN_ERROR_ORG_INACTIVE	Organization is inactive
LOGIN_ERROR_ORG_IS_DOT_ORG	Organization is a DOT
LOGIN_ERROR_ORG_LOCKOUT	Organization locked
LOGIN_ERROR_ORG_SIGNING_UP	
LOGIN_ERROR_ORG_SUSPENDED	Organization suspended
LOGIN_ERROR_OUTLOOK_DISABLED	Outlook integration disabled
LOGIN_ERROR_PAGE_REQUIRES_LOGIN	
LOGIN_ERROR_PASSWORD_EMPTY	
LOGIN_ERROR_PASSWORD_LOCKOUT	Password lockout
LOGIN_ERROR_PORTAL_INACTIVE	Invalid - Portal disabled
LOGIN_ERROR_RATE_EXCEEDED	Login rate exceeded
LOGIN_ERROR_RESTRICTED_DOMAIN	Restricted IP
LOGIN_ERROR_RESTRICTED_TIME	Restricted time
LOGIN_ERROR_SESSION_TIMEOUT	
LOGIN_ERROR_SSO_PWD_INVALID	Invalid password
LOGIN_ERROR_SSO_SVC_DOWN	Your company's authentication service is down
LOGIN_ERROR_SSO_URL_INVALID	The Single Sign-On Gateway URL is invalid
LOGIN_ERROR_STORE	
LOGIN_ERROR_STORE_DOWN	
LOGIN_ERROR_SWITCH_SFDC_INSTANCE	
LOGIN_ERROR_SWITCH_SFDC_LOGIN	
LOGIN_ERROR_SYNCOFFLINE_DISBLD	Failed: Mobile disabled
LOGIN_ERROR_SYSTEM_DOWN	
LOGIN_ERROR_UNKNOWN_ERROR	Login invalid

API Error Code	Details (If Available)
LOGIN_ERROR_USER_API_ONLY	Failed: API-only user
LOGIN_ERROR_USER_FROZEN	User is frozen
LOGIN_ERROR_USER_INACTIVE	User is inactive
LOGIN_ERROR_USER_NON_MOBILE	Failed: Mobile license required
LOGIN_ERROR_USER_STORE_ACCESS	
LOGIN_ERROR_USERNAME_EMPTY	
LOGIN_ERROR_WIRELESS_DISABLED	Wireless disabled
LOGIN_ERROR_WIRELESS_TRIAL_EXP	Wireless trial expired
LOGIN_LIGHTNING_LOGIN	Lightning Login required
LOGIN_NO_ERROR	
LOGIN_OAUTH_API_DISABLED	Failed: OAuth API access disabled
LOGIN_OAUTH_CONSUMER_DELETED	Failed: Consumer Deleted
LOGIN_OAUTH_DS_NOT_EXPECTED	Failed: Activation secret not expected
LOGIN_OAUTH_EXCEED_GET_AT_LMT	Failed: Get Access Token Limit Exceeded
LOGIN_OAUTH_INVALID_CODE_CHALLENGE	Failed: Invalid Code Challenge
LOGIN_OAUTH_INVALID_CODE_VERIFIER	Failed: Invalid Code Verifier
LOGIN_OAUTH_INVALID_DEVICE	Failed: Device Id missing or not registered
LOGIN_OAUTH_INVALID_DS	Failed: Activation secret invalid
LOGIN_OAUTH_INVALID_DSIG	Failed: Signature Invalid
LOGIN_OAUTH_INVALID_IP	Failed: IP Address Not Allowed
LOGIN_OAUTH_INVALID_NONCE	Failed: Invalid Nonce
LOGIN_OAUTH_INVALID_SIG_METHOD	Failed: Invalid Signature Method
LOGIN_OAUTH_INVALID_TIMESTAMP	Failed: Invalid Timestamp
LOGIN_OAUTH_INVALID_TOKEN	Failed: Invalid Token
LOGIN_OAUTH_INVALID_VERIFIER	Failed: Invalid Verifier
LOGIN_OAUTH_INVALID_VERSION	Failed: Version Not Supported
LOGIN_OAUTH_MISSING_DS	Activation secret missing
LOGIN_OAUTH_NO_CALLBACK_URL	Failed: Invalid Callback URL
LOGIN_OAUTH_NO_CONSUMER	Missing Consumer Key Parameter
LOGIN_OAUTH_NO_TOKEN	Missing OAuth Token Parameter

API Error Code	Details (If Available)
LOGIN_OAUTH_NONCE_REPLAY	Failed: Nonce Replay Detected
LOGIN_OAUTH_PACKAGE_MISSING	Package for this consumer is not installed in your organization
LOGIN_OAUTH_PACKAGE_OLD	Installed package for this consumer is out of date
LOGIN_OAUTH_UNEXPECTED_PARAM	Failed: Unexpected parameter
LOGIN_ORG_TRIAL_EXP	Trial Expired
LOGIN_READONLY_CANNOT_VALIDATE	
LOGIN_SAML_INVALID_AUDIENCE	Failed: Audience Invalid
LOGIN_SAML_INVALID_CONFIG	Failed: Configuration Error/Perm Disabled
LOGIN_SAML_INVALID_FORMAT	Failed: Assertion Invalid
LOGIN_SAML_INVALID_IN_RES_TO	Failed: InResponseTo Invalid
LOGIN_SAML_INVALID_ISSUER	Failed: Issuer Mismatched
LOGIN_SAML_INVALID_ORG_ID	Failed: Invalid Organization Id
LOGIN_SAML_INVALID_PORTAL_ID	Failed: Invalid Portal Id
LOGIN_SAML_INVALID_RECIPIENT	Failed: Recipient Mismatched
LOGIN_SAML_INVALID_SESSION_LEVEL	
LOGIN_SAML_INVALID_SIGNATURE	Failed: Signature Invalid
LOGIN_SAML_INVALID_SITE_URL	Failed: Invalid Site URL
LOGIN_SAML_INVALID_STATUS	Failed: Status Invalid
LOGIN_SAML_INVALID_SUB_CONFIRM	Failed: Subject Confirmation Error
LOGIN_SAML_INVALID_TIMESTAMP	Failed: Assertion Expired
LOGIN_SAML_INVALID_USERNAME	Failed: Username Or SSO Id Invalid
LOGIN_SAML_INVALID_VERSION	
LOGIN_SAML_MISMATCH_CERT	Failed: Signature Invalid/Configured Certificate Mismatch
LOGIN_SAML_MISSING_ORG_ID	Failed: Missing Organization Id for Portal login
LOGIN_SAML_MISSING_PORTAL_ID	Failed: Missing Portal Id
LOGIN_SAML_PROVISION_ERROR	Failed: SAML Provision Error
LOGIN_SAML_REPLAY_ATTEMPTED	Failed: Replay Detected
LOGIN_SAML_SITE_INACTIVE	Failed: Specified Site is Inactive
LOGIN_TWOFACTOR_REQ	Two-factor required

Usage

Use LOGIN_STATUS to determine whether your users' login attempts were successful. For example, you can determine whether a departed employee attempted to log in successfully or unsuccessfully.



A	B	C	D	E	F	G	H	I	J	K
EVENT_TYPE	CLIENT_IP	URI	SESSION_KEY	LOGIN_KEY	REQUEST_STATUS	USER_NAME	TIMESTAMP_DERIVED	USER_ID_DERIVED	URI_ID_DERIVED	LOGIN_STATUS
Login	1.2.3.4	/my/uri/path/005B0000000GSwO	sidHash_basic	loginHash_basic	requestStatus_common	userName_L	2015-01-01T00:00:00.000	001xx0000000useAAA	005B0000000GSwOIAW	LOGIN_NO_ERROR

SEE ALSO:

Login Event Type
EventLogFile Supported Event Types
EventLogFile

Login As Event Type

Login As events contain details about what a Salesforce admin did while logged in as another user.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DELEGATED_USER_ID`	**Type** Id

	Description The 15-character ID of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`DELEGATED_USER_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`DELEGATED_USER_NAME`	**Type** String **Description** The username of the user who's using Salesforce services through the UI or API. In this case, the user who's doing the impersonation.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123

Field	Details
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ) **Example** 2015-07-27T11:32:59.555Z
URI	**Type** String **Description** The URI of the page that's receiving the request.

	Example `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Logout Event Type

Logout events contain details of user logouts.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`API_TYPE`	**Type** String **Description** The type of API request.

Field	Details
	Possible Values • `D`: Apex Class • `E`: SOAP Enterprise • `I`: SOAP Cross Instance • `M`: SOAP Metadata • `O`: Old SOAP • `P`: SOAP Partner • `S`: SOAP Apex • `T`: SOAP Tooling • `X`: XmlRPC • `f`: Feed • `l`: Live Agent • `p`: SOAP ClientSync
`API_VERSION`	**Type** String **Description** The version of the API that's being used. **Example** 36.0
`APP_TYPE`	**Type** Number **Description** The application type that was in use upon logging out. **Example Values** • `1007`: SFDC Application • `1014`: Live Agent • `2501`: CTI • `2514`: OAuth • `3475`: SFDC Partner Portal
`BROWSER_TYPE`	**Type** String **Description** The browser used for login. **Example Values** • `10011000`: Internet Explorer Desktop 11 • `10011001`: Internet Explorer Mobile 11 • `11035000`: Firefox Desktop 35

- `11035001`: Firefox Mobile 35
- `13050000`: Chrome Desktop 50
- `13050001`: Chrome Mobile 50
- `14012000`: Safari Desktop 12
- `14012001`: Safari Mobile 12

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CLIENT_VERSION`	**Type** Number **Description** The version of the client that was in use upon logging out.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PLATFORM_TYPE`	**Type** Number **Description** The code for the client platform. If a timeout caused the logout, this field is null. **Example Values** • `1000`: Windows • `2003`: Macintosh/Apple OSX

	- `5005`: Android - `5006`: iPhone - `5007`: iPad
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RESOLUTION_TYPE`	**Type** Number **Description** The screen resolution of the client. If a timeout caused the logout, this field is null.
`SESSION_LEVEL`	**Type** String **Description** The security level of the session that was used when logging out. **Possible Values** - `1`: Standard Session - `2`: High-Assurance Session
`SESSION_TYPE`	**Type** String **Description** The session type that was used when logging out. **Possible Values** - `A`: API - `I`: APIOnlyUser - `N`: ChatterNetworks - `Z`: ChatterNetworksAPIOnly - `C`: Content - `P`: OauthApprovalUI - `O`: Oauth2 - `T`: SiteStudio - `R`: SitePreview

- S: SubstituteUser
- B: TempContentExchange
- G: TempOauthAccessTokenFrontdoor
- Y: TempVisualforceExchange
- F: TempUIFrontdoor
- U: UI
- E: UserSite
- V: Visualforce
- W: WDC_API

TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ) **Example** 2015-07-27T11:32:59.555Z
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
USER_INITIATED_LOGOUT	**Type** Boolean

Field	Details
	Description The value is 1 if the user intentionally logged out of the organization by clicking the **Logout** button. If the user's session timed out due to inactivity or another implicit logout action, the value is 0.
`USER_TYPE`	**Type** String **Description** The category of user license of the user that logged out. **Possible Values** • `S`: Standard • `P`: Partner • `p`: Customer Portal Manager • `C`: Customer Portal User • `O`: Power Custom • `o`: Custom • `L`: Package License Manager • `N`: Salesforce to Salesforce • `G`: Guest • `D`: External Who • `A`: Automated Process • `b`: High Volume Portal • `n`: CSN Only • `F`: Self-Service

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Metadata API Operation Event Type

Metadata API Operation events contain details of Metadata API retrieval and deployment requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`API_VERSION`	**Type** String

	Description The version of the API that's being used. **Example** 36.0
`CLIENT_ID`	**Type** String **Description** The API client ID.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I

Field	Details
OPERATION	**Type** String **Description** The operation that's being performed. **Possible Values** • meta_deploy • meta_list • meta_retrieve • meta_synchronous_create • meta_synchronous_read • meta_synchronous_upsert
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD

`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

Field	Details
	Example 0059000000I1SNIA0

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Multiblock Report Event Type

Multiblock Report events contain details about Joined Report reports.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
DB_TOTAL_TIME	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to CPU_TIME to determine whether performance issues are occurring in the database layer or in your own code.
EVENT_TYPE	**Type** String

	Description The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`HAS_CHART`	**Type** Boolean **Description** True if the report has a chart.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`MASTER_REPORT_ID`	**Type** String **Description** The 15-character ID of the master report.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_STATUS`	**Type** String

	Description The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String

Field	Details
	Description The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Package Install Event Type

Package Install events contain details about package installation in the organization.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String

	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`FAILURE_TYPE`	**Type** String **Description** A general categorization of any error that's encountered.
`IS_MANAGED`	**Type** Boolean **Description** True if the operation is performed on a managed package.
`IS_PUSH`	**Type** Boolean **Description** True if the package was installed as a result of a push upgrade.
`IS_RELEASED`	**Type** Boolean **Description** True if the operation is performed on a released package.

`IS_SUCCESSFUL`	**Type** Boolean **Description** True if the package was successfully installed.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`OPERATION_TYPE`	**Type** String **Description** The type of package operation. **Possible Values** • INSTALL • UPGRADE • EXPORT • UNINSTALL • VALIDATE_PACKAGE • INIT_EXPORT_PKG_CONTROLLER
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PACKAGE_NAME`	**Type** String **Description** The name of the package that's being installed.
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`

URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `0059000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Platform Encryption Event Type

Platform Encryption event contains information about tenant secret and derived encryption key usage. This event type is available in API versions 41.0 and later.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
ACTION	**Type** String **Description** The name and type of the event.

	Possible Values • TS Imported: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, imported by a customer. • TS Generated: A tenant secret generated by the Shield Key Management Service (KMS). • Key Derived: An encryption key derived from a tenant secret for encryption or decryption. • TS Wrapped: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, encrypted for storage. • Key Delivered: A data encryption key delivered for encryption or decryption. • TS Stored: A tenant secret generated by the Shield Key Management Service (KMS), or customer-supplied key material, stored encrypted in the database. • TS Read: An encrypted tenant secret generated by the Shield Key Management Service (KMS), or encrypted customer-supplied key material, that is loaded for encryption or decryption. • TS Unwrapped: An encrypted tenant secret generated by the Shield Key Management Service (KMS), or encrypted customer-supplied key material, unwrapped for use by the KMS. • TS Exported: An encrypted tenant secret exported by a customer. • TS Destroyed: A tenant secret and related data encryption key destroyed by a customer.
`CLIENT_IP`	**Type** String **Description** The IP address of the client that’s using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as “Salesforce.com IP”. **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the

	app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. The value is always PlatformEncryption.
`KEY_ID`	**Type** String **Description** The 15-character ID of the tenant secret. **Example** 02GD000000096Cb
`KEY_ID_DERIVED`	**Type** String **Description** The 18-character ID of the derived encryption key. **Example** 02GD000000096CbMAI
`KEY_TYPE`	**Type** String **Description** The type of tenant secret. **Possible Values** • Data • DeterministicData • EinsteinAnalytics • SearchIndex
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`METHOD`	**Type** String

Field	Details
	Description The string that identifies a change in tenant secret Active state. For example, tenant secrets become active when they are created, and are made inactive when they are exported. **Examples** • TS Exported: User ID • TS Generated: HSM or BYOK • TS Unwrapped: Tenant Secret or BYOK
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** DateTime

	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API.

	Example `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Queued Execution Event Type

Queued Execution events contain details about queued executions—for example, batch Apex.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds that it took to complete the batch apex request. This field indicates the amount of activity taking place in the app server layer, allowing you to identify pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTRY_POINT`	**Type** String

Field	Details
	Description The name of the Apex class that serves as the execution point for the batch job. **Example** TaskPhoneExtensionBatchUpdate
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`JOB_ID`	**Type** String **Description** The ID of the batch Apex job. **Example** 7073000000lDquo
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • S: Success • F: Failure • U: Undefined • A: Authorization Error • R: Redirect • N: Not Found
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670

Field	Details
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ) **Example** 2015-07-27T11:32:59.555Z
URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** /home/home.jsp
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Report Event Type

Report events contain information about what happened when a user ran a report.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`AVERAGE_ROW_SIZE`	**Type** Number **Description** The average row size of all rows in the Report event, in bytes. A large average size, coupled with a high `ROW_COUNT`, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 700
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.

`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`DISPLAY_TYPE`	**Type** String **Description** The report display type, indicating the run mode of the report. **Possible Values** • `D`: Dashboard • `S`: Show Details • `H`: Hide Details
`ENTITY_NAME`	**Type** String **Description** The name of the object affected by the trigger.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I

NUMBER_BUCKETS	**Type** Number **Description** The number of buckets that were used in the report.
NUMBER_COLUMNS	**Type** Number **Description** The number of columns in the report.
NUMBER_EXCEPTION_FILTERS	**Type** Number **Description** The number of exception filters that are used in the report.
ORGANIZATION_ID	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
RENDERING_TYPE	**Type** String **Description** The report rendering type, describing the format of the report output. **Possible Values** • W: Web (HTML) • E: Email • P: Printable • X: Excel • C: Comma-separated values (CSV) • J: JavaScript Object Notation (JSON)
REPORT_ID	**Type** Id **Description** The 15-character ID of the report that was run.
REPORT_ID_DERIVED	**Type** Id

	Description The 18-character case insensitive ID of the report that was run.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`ROW_COUNT`	**Type** Number **Description** The number of rows that were processed in the Report event. High row counts, coupled with a high `AVERAGE_ROW_SIZE`, can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor. **Example** 150
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.

SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
SORT	**Type** String **Description** The sort column and order that was used in the report.
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

Usage

Example: Identify Large Report Exports by User

Get Report event type data from the EventLogFile object using REST:

```
/services/data/v40.0/query?q=SELECT+Id+,+EventType+,+LogFile+,+LogDate+,+LogFileLength+FROM+EventLogFile+WHERE+

    LogDate+>+Yesterday+AND+EventType+=+'Report'
```

After you download the report data to a ReportData database table, query it and filter on reports that were exported with high row counts and size:

```
SELECT USER_ID FROM ReportData WHERE (RENDERING_TYPE=C OR RENDERING_TYPE=X OR
RENDERING_TYPE=P) AND ROW_COUNT>150000 AND AVERAGE_ROW_SIZE>1500
```

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Report Export Event Type

Report Export events contain details about reports that a user exported.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CLIENT_INFO`	**Type** String **Description** Information about the client that's using Salesforce services.
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization.

	Example 00D000000000123
`REPORT_DESCRIPTION`	**Type** String **Description** Information about the report that was run.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`)

	Example `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

REST API Event Type

REST API events contain details about REST-specific requests.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`ENTITY_NAME`	**Type** Set **Description** API objects that are accessed.

	Example Account, Opportunity, Contact, and so on.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`MEDIA_TYPE`	**Type** String **Description** The media type of the response.
`METHOD`	**Type** String **Description** The HTTP method of the request—GET, POST, PUT, and so on.
`NUMBER_FIELDS`	**Type** Number **Description** The number of fields or columns, where applicable.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123

Field	Details
REQUEST_SIZE	**Type** Number **Description** The size of the callout request body, in bytes.
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • S: Success • F: Failure • U: Undefined • A: Authorization Error • R: Redirect • N: Not Found
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RESPONSE_SIZE	**Type** Number **Description** The size of the callout response, in bytes.
ROWS_PROCESSED	**Type** Number **Description** The number of rows that were processed in the request. **Example** 150
RUN_TIME	**Type** Number

	Description The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`STATUS_CODE`	**Type** Number **Description** The HTTP status code for the response.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID

	Description The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_AGENT`	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Sandbox Event Type

Sandbox events contain details about sandbox copies.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CURRENT_SANDBOX_ORG_ID`	**Type** Id **Description** The 15-character ID of the current sandbox organization.

`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PENDING_SANDBOX_ORG_ID`	**Type** Id **Description** The 15-character ID of the target sandbox org.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SANDBOX_ID`	**Type** Id **Description** The 15-character ID of the sandbox organization.
`STATUS`	**Type** String **Description** The status of the sandbox copy.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services.

Field	Details
	Example 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ) **Example** 2015-07-27T11:32:59.555Z
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Search Event Type

Search events contain details about the user's search query. All searches within the app, including Communities, are included. However, unauthenticated users won't have a unique Salesforce user ID.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
EVENT_TYPE	**Type** String

	Description The type of event. Value is always Search. For details, see EventLogFile Supported Event Types.
`NUM_RESULTS`	**Type** Number **Description** Number of results returned by the search query. **Possible Values** • 0 • 25 • 1000
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PREFIXES_SEARCHED`	**Type** String **Description** Space-separated list of key prefixes that were searched. **Example** 001 006 ka0
`QUERY_ID`	**Type** String **Description** Unique ID of the search query. **Example** -2vx8relit08r
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV

`SEARCH_QUERY`	**Type** String **Description** The first 100 characters of the search query. **Example** Salesforce
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`USER_ID`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Search Click Event Type

Search Click events contain details about the user's interaction with the search results. All searches within the app, including Communities, are included. However, unauthenticated users won't have a unique Salesforce user ID.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLICKED_RECORD_ID`	**Type** String **Description** The 15-character ID of the result the user clicked in the search results page. **Example** a07B00000031pRV
`EVENT_TYPE`	**Type** String **Description** The type of event. Value is always SearchClick. For details, see EventLogFile Supported Event Types.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`QUERY_ID`	**Type** String **Description** Unique ID of the search query. **Example** -2vx8relit08r
`RANK`	**Type** Number **Description** Ranking of the result clicked in the search results page. **Example** 2
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`USER_ID`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types
EventLogFile

Sites Event Type

Sites events contain details of Site.com requests. Requests can originate from the browser (UI).

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details

`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`HTTP_HEADERS`	**Type** String **Description** The HTTP headers that were sent in the request.
`HTTP_METHOD`	**Type** String **Description** The HTTP method of the request—GET, POST, PUT, and so on.
`IS_API`	**Type** Boolean

	Description True if this page was an API or Web Services request.
`IS_ERROR`	**Type** Boolean **Description** True if this page was an error page.
`IS_FIRST_REQUEST`	**Type** Boolean **Description** 1 if this page is the first Visualforce transaction in the request, or 0 if it isn't.
`IS_GUEST`	**Type** Boolean **Description** True if this page was a guest (unauthenticated) request.
`IS_SECURE`	**Type** Boolean **Description** True if this request is secure.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PAGE_NAME`	**Type** String

	Description The name of the Visualforce page that was requested.
QUERY	**Type** String **Description** The SOQL query, if one was performed.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
REQUEST_STATUS	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • S: Success • F: Failure • U: Undefined • A: Authorization Error • R: Redirect • N: Not Found
REQUEST_TYPE	**Type** String **Description** The request type. **Possible Values** • page: a normal request for a page • content_UI: a content request for a page that originated in the user interface • content_apex: a content request initiated by an Apex call • PDF_UI: a request for a page in PDF format through the user interface

- `PDF_apex`: a request for PDF format by an Apex call (usually a Web Service call)

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`SITE_ID`	**Type** Id **Description** The 15-character ID of the Site.com site.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`

URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Time-Based Workflow Event Type

Time-Based Workflow events contain details about queue activity monitoring.

For details about event monitoring, see the Trailhead Event Monitoring module or the REST API Developer's Guide.

Fields

Field	Details
DATA	**Type** String **Description** The record details of time queue activity.
EVENT_TYPE	**Type** String

	Description The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOG_GROUP_ID`	**Type** String **Description** Marks log records that are committed or rolled back.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NUMBER_OF_RECORDS`	**Type** Number **Description** The number of processed records.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`SESSION_KEY`	**Type** String

	Description The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TYPE`	**Type** String **Description** The type of time-based workflow event. • `UIDEL`—An entry was deleted from the Time-Based Workflow page in Setup. • `ERRDEL`—An entry was deleted from the workflow queue, because there was an error reading the record that triggered the workflow rule. The associated time-dependent actions weren't processed. • `DELETE`—An entry was deleted from the workflow queue, because it's no longer relevant. For example, the criteria are no longer met by the associated record. If the evaluation date for the entry changed, the entry is re-added with the updated evaluation date. • `PROC`—An entry was deleted from the workflow queue after processing a time-dependent action.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Transaction Security Event Type

Transaction Security events contain details about policy execution.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVALUATION_TIME_MS`	**Type** Number **Description** The time in milliseconds used to evaluate the policy.
`EVENT_TIMESTAMP`	**Type** String **Description** The time at which the Transaction Security event was generated in ISO8601-compatible format (YYYY-MM-DDTHH:MM:SS.sssZ). This value might be earlier than TIMESTAMP_DERIVED by the amount of time taken to log the event. **Example** `2015-07-27T11:32:59.555Z`
`EVENT_TYPE`	**Type** String

	Description The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`POLICY_ID`	**Type** Id **Description** The 15-character ID of the policy being evaluated. **Example** `00530000009M943`
`POLICY_ID_DERIVED`	**Type** Id **Description** The 18-character case-insensitive ID of the policy being evaluated. **Example** `00590000000I1SNIA0`
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

	Example 3nWgxWbDKWWDIk0FKfF5DV
`RESULT`	**Type** String **Description** The outcome of evaluating the policy. **Example** TRIGGERED or NOT TRIGGERED
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** Datetime **Description** The time the event was logged in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`). This value might be later than EVENT_TIMESTAMP by the amount of time between when the event occurred and when it was logged. **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String

Field	Details
	Description The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `0059000000I1SNIA0`

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

URI Event Type

URI events contain details about user interaction with the web browser UI.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String

	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String

	Description The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`REFERRER_URI`	**Type** String **Description** The referring URI of the page that's receiving the request.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`RUN_TIME`	**Type** Number

Field	Details
	Description The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. For more granular URI information for Lightning Experience and the Salesforce app, see the Lightning Error, Lightning Interaction, Lightning Page View, and Lightning Performance event types. **Examples** `/aura` (Lightning Experience), `/lightning` (Lightning Experience and the Salesforce app), `/home/home.jsp` (Salesforce Classic)
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Visualforce Event Type

Visualforce events contain details of Visualforce requests. Requests can originate from the browser (UI).

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CONTROLLER_TYPE`	**Type** Number **Description** The type of controller that's used by the requested Visualforce page.

`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`DB_BLOCKS`	**Type** Number **Description** Indicates how much activity is occurring in the database. A high value for this field suggests that adding indexes or filters on your queries would benefit performance.
`DB_CPU_TIME`	**Type** Number **Description** Allows you to monitor trends in database uptime.
`DB_TOTAL_TIME`	**Type** Number **Description** The time in nanoseconds for a database round trip. Compare this field to `CPU_TIME` to determine whether performance issues are occurring in the database layer or in your own code.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`HTTP_METHOD`	**Type** String **Description** The HTTP method of the request—GET, POST, PUT, and so on.
`IS_AJAX_REQUEST`	**Type** Boolean **Description** The value is `true` if the request is a partial page request.

`IS_FIRST_REQUEST`	**Type** Boolean **Description** 1 if this page is the first Visualforce transaction in the request, or 0 if it isn't.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`MANAGED_PACKAGE_NAMESPACE`	**Type** String **Description** If the page is part of a managed package, the namespace of that package.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`PAGE_NAME`	**Type** String **Description** The name of the Visualforce page that was requested.
`QUERY`	**Type** String **Description** The SOQL query, if one was performed.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`.

	Example 3nWgxWbDKWWDIk0FKfF5DV
`REQUEST_SIZE`	**Type** Number **Description** The size of the request body, in bytes.
`REQUEST_STATUS`	**Type** String **Description** The status of the request for a page view or user interface action. **Possible Values** • `S`: Success • `F`: Failure • `U`: Undefined • `A`: Authorization Error • `R`: Redirect • `N`: Not Found
`REQUEST_TYPE`	**Type** String **Description** The request type. **Possible Values** • `page`: a normal request for a page • `content_UI`: a content request for a page that originated in the user interface • `content_apex`: a content request initiated by an Apex call • `PDF_UI`: a request for a page in PDF format through the user interface • `PDF_apex`: a request for PDF format by an Apex call (usually a Web Service call)
`RESPONSE_SIZE`	**Type** Number **Description** The size of the response, in bytes.

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.

USER_AGENT	**Type** Number **Description** The numeric code for the type of client used to make the request (for example, the browser, application, or API).
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** 00530000009M943
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** 00590000000I1SNIA0
VIEW_STATE_SIZE	**Type** Number **Description** The size of the Visualforce view state, in bytes.

SEE ALSO:
EventLogFile Supported Event Types
EventLogFile

Wave Change Event Type

Wave Change events represent route or page changes made in the Salesforce Analytics user interface.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String

	Description The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event. **Example** `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`IS_NEW`	**Type** Boolean **Description** If the change routes to a new page, the value of this field is true. If it routes to an existing page, this field is false.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123

RECORD_ID	**Type** String **Description** The Salesforce ID of the Analytics object.
REOPEN_COUNT	**Type** Number **Description** If IS_NEW is false, the number of times that an existing page opens.
REQUEST_ID	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same REQUEST_ID. **Example** 3nWgxWbDKWWDIk0FKfF5DV
RUN_TIME	**Type** Number **Description** The amount of time that the request took in milliseconds.
SESSION_KEY	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
TIMESTAMP	**Type** String **Description** The access time of Salesforce services. **Example** 20130715233322.670
TIMESTAMP_DERIVED	**Type** DateTime

Field	Details
	Description The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TYPE`	**Type** String **Description** The Analytics object type.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`
`WAVE_SESSION_ID`	**Type** String

Field	Details
	Description The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
`WAVE_TIMESTAMP`	**Type** Number **Description** The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Wave Interaction Event Type

Wave Interaction events track user interactions with the Analytics user interface made via the browser.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
`CLIENT_IP`	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
`CPU_TIME`	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer, highlighting pieces of Apex or Visualforce code that need refactoring.
`EVENT_TYPE`	**Type** String **Description** The type of event.

Field	Details
	Example `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NUM_CLICKS`	**Type** Number **Description** The number of clicks performed on a page in the Wave user interface.
`NUM_SESSIONS`	**Type** Number **Description** The number of times a user returned to a particular page.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`READ_TIME`	**Type** Number **Description** The amount of time a user spent on a particular tab.
`RECORD_ID`	**Type** String **Description** The Salesforce ID of the Analytics object.
`REQUEST_ID`	**Type** String

Field	Details
	Description The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV
`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TOTAL_TIME`	**Type** Number **Description** The total amount of time a tab was open in milliseconds.
`TYPE`	**Type** String

	Description The Analytics object type.
`URI`	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
`URI_ID_DERIVED`	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
`USER_ID`	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
`USER_ID_DERIVED`	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`
`WAVE_SESSION_ID`	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
`WAVE_TIMESTAMP`	**Type** Number

	Description The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

Wave Performance Event Type

Wave Performance events help you track trends in your Analytics performance.

For details about event monitoring, see the Trailhead Event Monitoring module or REST API Developer's Guide.

Fields

Field	Details
CLIENT_IP	**Type** String **Description** The IP address of the client that's using Salesforce services. A Salesforce internal IP (such as a login from Salesforce Workbench or AppExchange) is shown as "Salesforce.com IP". **Example** 96.43.144.26
CPU_TIME	**Type** Number **Description** The CPU time in milliseconds used to complete the request. This field indicates the amount of activity taking place in the app server layer.
EPT	**Type** Number **Description** The experienced page time in milliseconds.
EVENT_TYPE	**Type** String **Description** The type of event.

	Example `ReportExport`, `URI`, `API`, `RestApi`, and so on. For details, see EventLogFile Supported Event Types on page 933.
`LOGIN_KEY`	**Type** String **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. **Example** GeJCsym5eyvtEK2I
`NAME`	**Type** String **Description** The asset title or query string.
`ORGANIZATION_ID`	**Type** Id **Description** The 15-character ID of the organization. **Example** 00D000000000123
`QUERY_ID`	**Type** String **Description** The ID of the Wave query.
`RECORD_ID`	**Type** String **Description** The Salesforce ID of the Analytics object.
`REQUEST_ID`	**Type** String **Description** The unique ID of a single transaction. A transaction can contain one or more events. Each event in a given transaction has the same `REQUEST_ID`. **Example** 3nWgxWbDKWWDIk0FKfF5DV

`RUN_TIME`	**Type** Number **Description** The amount of time that the request took in milliseconds.
`SESSION_KEY`	**Type** String **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. **Example** d7DEq/ANa7nNZZVD
`TAB_ID`	**Type** String **Description** The ID of the particular Wave tab in the user interface.
`TIMESTAMP`	**Type** String **Description** The access time of Salesforce services. **Example** `20130715233322.670`
`TIMESTAMP_DERIVED`	**Type** DateTime **Description** The access time of Salesforce services in ISO8601-compatible format (`YYYY-MM-DDTHH:MM:SS.sssZ`) **Example** `2015-07-27T11:32:59.555Z`
`TYPE`	**Type** String **Description** The Analytics object type.
`UI_RENDER_TIME`	**Type** String **Description** The amount of time that it took for the user interface to render.

URI	**Type** String **Description** The URI of the page that's receiving the request. **Example** `/home/home.jsp`
URI_ID_DERIVED	**Type** ID **Description** The 18-character case insensitive ID of the URI of the page that's receiving the request.
USER_ID	**Type** Id **Description** The 15-character ID of the user who's using Salesforce services through the UI or the API. **Example** `00530000009M943`
USER_ID_DERIVED	**Type** Id **Description** The 18-character case insensitive ID of the user who's using Salesforce services through the UI or the API. **Example** `00590000000I1SNIA0`
WAVE_SESSION_ID	**Type** String **Description** The ID of a particular session of Analytics. Use this field to determine which log lines originated from a particular session.
WAVE_TIMESTAMP	**Type** Number

Description

The time at which this log line was generated.

SEE ALSO:

EventLogFile Supported Event Types

EventLogFile

EventRelation

Represents a person (a user, lead, or contact) or a resource (such as a conference room) invited to an event. This object lets you add or remove invitees from an event and use the API to manage invitees' responses to invitations. If Shared Activities is enabled, EventRelation can also represent other objects that are related to an event. EventRelation does not support triggers, workflow, or data validation rules.

EventRelation allows a variable number of relationships and handles deleted events differently, depending on whether Shared Activities is enabled.

A non-recurring event can have up to 1,000 invitees. A recurring event can have up to 100 invitees.

If Shared Activities Isn't Enabled

- EventRelation records only represent invitees (contacts, users, and resources).
- An event can be related to one contact or lead.

If Shared Activities Is Enabled

- EventRelation records can represent:
  - Invitees (`IsInvitee=` is set to `true`)

    OR
  - Related contacts or lead (`IsParent` is set to `true`)
- An event can be related to up to 50 contacts or one lead. These people may or may not be invitees. The number of allowed invitees is not affected by the number of related contacts. If a contact or lead is also an invitee, there is one EventRelation record for that person with `IsInvitee` and `IsParent` are set to `true`.
- An event can be related to a lead, contact, resource, account, or opportunity.
- An event can be related to a custom object that has the `HasActivities` attribute set to `true`.
- If you delete an event, then relations between the event and any specified contacts, leads, and other records are also deleted.
- If you delete the EventRelation record representing a relation then the corresponding relation field may be cleared on the event.
- If you delete the EventRelation record representing the `WhoId` on an event, then another Who, if any, from the event's `EventWhoIds` field will be promoted to the `WhoId`.
- If you restore a deleted event, relations between the event and any specified contacts, leads, and records are also restored. The `WhoId`, `WhatId`, and `AccountId` field values are recalculated using the field values on EventRelation.

Whether or not Shared Activities is enabled, an event can be related to one other kind of record, such as an account, an opportunity, or a custom object.

Note:

- With API versions 26.0 and later, the EventRelation object replaces the EventAttendee object, and the EventAttendee object is no longer visible. You can still query the EventAttendee object using packages that support API versions 25.0 and earlier, or by using Apex.
- An EventRelation object can't be created for a child event.
- EventRelation includes deactivated users.
- In API versions 25.0 and earlier, you can't use `query()`, `delete()`, or `update()` with events related to more than one contact.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `queryAll()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the Account ID of the relation. For information on IDs, see ID Field Type. `AccountId` is visible when Shared Activities is enabled.
`EventId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Contains the ID of the event. This value can't be changed after it's been specified.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsInvitee`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the relation is an invitee. • `IsInvitee` is visible while Shared Activities is being enabled, after it has been enabled, and while it is being disabled. • `IsInvitee` defaults to `true` while Shared Activities is being enabled, after it has been enabled, and while it is being disabled if `IsInvitee`, `IsParent`, and `IsWhat` are not set. This configuration ensures compatibility when Shared Activities isn't enabled and EventRelation represents event invitees only. • `IsInvitee` defaults to `false` when Shared Activities is enabled if `IsParent` is set to `true`.
`IsParent`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** `IsParent` is visible only when Shared Activities is enabled. When `false`, indicates that the relation is an invitee (a contact, lead, or user). When `true`, indicates that the relation is a Who or What, as determined by `IsWhat` field.
`IsWhat`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** `IsWhat` is visible only when Shared Activities is enabled. The value is relevant only if `IsParent` is `true`. When `IsWhat` is `true`, the relation specified by `RelationId` is a What (an account, opportunity, custom object, etc.). When `IsWhat` is `false`, the relation specified by `RelationId` is a Who (a contact, lead, or user).
`RelationId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Contains the ID of the person (User, Contact, or Lead) or the resource invited to an event. When Shared Activities is enabled, `RelationId` can also contain the ID of an account, opportunity, or other object related to an event. This value can't be changed after it's been specified.

Field	Details
RespondedDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Indicates the most recent date and time when the invitee responded to an invitation to an event.
Response	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contains optional text that the invitee can enter when responding to an invitation to an event.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the invitee status with one of the following values: • `New`: Invitee has received the invitation but hasn't yet responded. This value is the default. • `Declined`: Invitee has declined the invitation. • `Accepted`: Invitee has accepted the invitation. Note: `Uninvited` and `Maybe` aren't currently supported.

Usage

- Invitee related lists display slightly different content. In the Salesforce app, the invitee related list includes invitees only, whereas in the full site, it also includes the event owner. To reproduce the full site functionality in the Salesforce app, use the following API queries.

  If you use Shared Activities in your Salesforce org, use this query:

  ```
  SELECT RelationId FROM EventRelation WHERE isInvitee = true AND eventId='[Event_Id]'
  ```

  where *`Event_Id`* is the child event's ID.

  If you don't use Shared Activities, use this query:

  ```
  SELECT RelationId FROM EventRelation WHERE eventId='[Event_Id]'
  ```

These queries get the main event's relations and display them for the given child event. To further filter the results, add a `WHERE` clause.

Send email notifications

To send email notifications for a given event, query EventRelation for the event, iterate through the list, examine the status, and send email notifications to every person who accepted the invitation.

Determine what events a given invitee is attending

To determine all the events that a particular person is attending during a given time period (for example, next week), you can have a client application query the Event object for a given date range, iterate through the results, and, for each event, query the EventRelation object to determine whether the particular person (`RelationId`) has accepted an invitation to that event.

Create an invitee if Shared Activities is enabled (or during the process of enabling it or rolling back)

If the invitee is already a contact or lead, update `IsInvitee` to `true`.

If the invitee is not already a contact or lead, create an EventRelation object for the invitee with `IsInvitee` set to `true`.

Create an invitee if Shared Activities is not enabled

Create an EventRelation object for the invitee.

Query relations to a contact or a lead

```
List<EventRelation> whoRelations = [SELECT Id, Relation.Name FROM
    EventRelation WHERE EventId = '00UD0000005zijD' AND isParent = true AND isWhat =
false];
```

Query invitee relations

```
List<EventRelation> inviteeRelations = [SELECT Id, Relation.Name FROM
    EventRelation WHERE EventId = '00UD0000005zijD' AND isInvitee = true];
```

Update an invitee relation to a contact or lead invitee relation

```
EventRelation er = [SELECT Id FROM EventRelation WHERE EventId =
    '00UD0000005zijD' AND isInvitee = true and isParent = false LIMIT 1];
er.isParent = true;
update er;
```

Update a contact or lead relation to a contact or lead invitee relation

```
EventRelation er = [SELECT Id FROM EventRelation WHERE EventId =
    '00UD0000005zijD' AND isParent = true and isInvitee = false LIMIT 1];
er.isInvitee = true;
update er;
```

Insert a contact or lead relation

```
EventRelation er = new EventRelation(EventId = '00UD0000005zijH',
    RelationId = '003D000000Q8aeV', isParent = true, isInvitee = false);
insert er;
```

Insert an invitee relation

If `isParent`, `isWhat` and `IsInvitee` are not set, and `RelationId` is a contact, lead, user, or calendar, `IsInvitee` defaults to `true`. This means if an EventRelation isn't specifically inserted as a relation to a contact or lead, it's treated as an Invitee relation by default.

```
EventRelation er = new EventRelation(EventId = '00UD0000005zijH',
    RelationId = '003D000000Q8adV');
insert er;
```

Reproduce invitee related list functionality in the Salesforce app

Invitee related lists display slightly different content in the Salesforce app and the full site. In the app, the invitee related list includes invitees only, whereas in the full site, it also includes the event owner.

If you use Shared Activities in your Salesforce org, use the following query to reproduce the full site functionality in the Salesforce app:

```
SELECT RelationId FROM EventRelation WHERE isInvitee = true AND eventId='[Event_Id]'
```

where *`Event_Id`* is the child event's ID.

If you don't use Shared Activities, use this query:

```
SELECT RelationId FROM EventRelation WHERE eventId='[Event_Id]'
```

These queries get the main event's relations and display them for the given child event. To further filter the results, add a `WHERE` clause.

SEE ALSO:

Event

EventWhoRelation

Object Basics

EventBusSubscriber

Represents a trigger, process, or flow that is subscribed to a platform event.

Supported Calls

`query()`

Special Access Rules

EventBusSubscriber is read only and can only be queried.

Fields

Field	Details
ExternalId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the subscriber. For example, the trigger ID.
LastError	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error message that the `EventBus.RetryableException` that the trigger has last thrown contains. This field applies to Apex triggers only. Available in API version 43.0 and later.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subscribed item, such as the trigger name. If the subscribed item's name is "Process", at least one process or flow Wait element is subscribed to the event.
Position	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The replay ID of the last event that the subscriber processed.
Retries	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times the trigger was retried due to throwing the `EventBus.RetryableException`. This field applies to Apex triggers only. Available in API version 43.0 and later.

Field	Details
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the status of the subscriber. Can be one of the following values: • `Running`—The trigger is actively listening to events. • `Idle`—The trigger hasn't received events for some time and is not actively listening to events. When new events are sent, the trigger receives the new events after a short delay and switches to the `Running` state. • `Error`—The trigger has been disconnected and stopped receiving published events. A trigger reaches this state when it exceeds the number of maximum retries with the `EventBus.RetryableException`. Trigger assertion failures and unhandled exceptions don't cause the Error state. To resume trigger execution, fix the trigger code and save it. • `Suspended`—The trigger is disconnected and can't receive events due to lack of permissions. • `Expired`—The trigger's connection expired. In rare cases, subscriptions can expire if they're inactive for an extended period of time.
`Tip`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The replay ID of the last published event.
`Topic`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subscription channel that corresponds to a platform event. The topic name is the event name appended with `__e`, such as `MyEvent__e`. The topic is the channel that the subscriber is subscribed to.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The subscriber type (`ApexTrigger`). If the subscriber is a process or flow Wait element, the type is blank.

Usage

Use EventBusSubscriber to query details about subscribers to a platform event. You can get all subscribers for a particular event by filtering on the `Topic` field, as follows.

```
SELECT ExternalId, Name, Position, Status, Tip, Type
FROM EventBusSubscriber
WHERE Topic='Low_Ink__e'
```

EventTag

Associates a word or short phrase with an Event.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.

Field Name	Details
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

EventTag stores the relationship between its parent TagDefinition and the Event being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

EventWhoRelation

Represents the relationship between an event and a lead or contacts. This derived object is a filtered version of the EventRelation on page 1136 object; that is, IsParent is `true` and IsWhat is `false`. It doesn't represent relationships to invitees or to accounts, opportunities, or other objects. This object is available in API versions 29.0 and later.

EventWhoRelation allows a variable number of relationships: one lead or up to 50 contacts. Available only if you've enabled Shared Activities for your organization.

Note: EventWhoRelation objects aren't created for child events.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EventId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.
`RelationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the contacts or lead related to the event.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the person related to the event is a contact or lead.

Usage

Apex example that queries relations to a contact or lead

```
List<EventWhoRelation> whoRelations = [SELECT Id, Relation.Name FROM
EventWhoRelation WHERE EventId = '00UD0000005zijD'];
```

SEE ALSO:

Event

EventRelation

ExternalDataSource

Represents an external data source, which defines connection details for integration with data and content that are stored outside the Salesforce org. This object is available in API version 27.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
AuthProviderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system. Only users with the “Customize Application” and “Manage AuthProviders” permissions can view this field. This field is available in API version 39.0 and later.
CustomConfiguration	**Type** textarea **Properties** Nillable **Description** A JSON-encoded configuration string that defines parameters specific to the type of external data source.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
Endpoint	**Type** textarea

Field Name	Details
	Properties Nillable **Description** The URL of the external system, or if that URL is defined in a named credential, the named credential URL. A named credential URL contains the scheme `callout:`, the name of the named credential, and an optional path. For example: `callout:`*`My_Named_Credential`*`/`*`some_path`*. You can append a query string to a named credential URL. Use a question mark (?) as the separator between the named credential URL and the query string. For example: `callout:`*`My_Named_Credential`*`/`*`some_path`*`?format=json`.
`isWritable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Query, Sort **Description** Lets the Lightning platform and users in this org create, update, and delete records for external objects associated with the external data source. The external object data is stored outside the org. By default, external objects are read only. Available only for Salesforce Connect external data sources. Available in API version 35.0 and later. However, with the cross-org adapter for Salesforce Connect, you can set this field to `true` only in API version 39.0 and later.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the `MasterLabel`.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** Master label for the external data source. This internal label doesn’t get translated.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation.
PrincipalType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies whether the org uses one set (NamedUser), multiple sets (PerUser), or no (Anonymous) credentials to access the external system. Each set of credentials corresponds to a login account on the external system. Corresponds to Identity Type in the user interface.
Protocol	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies whether to use OAuth, password authentication, or no authentication to access the external system. Some types of external data sources support only one value. • For cloud-based Files Connect external systems, select **Oauth 2.0**. • For on-premises systems, select **Password Authentication**. • For Simple URL data sources, select **No Authentication**.
Repository	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Used for SharePoint Online. An optional name of the repository in the data source. Not applicable to all data source types.
Type	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Specifies the adapter that connects to the external system.

Usage

Define an external data source to connect to data or content that's stored outside the Salesforce org. Then create external objects, which map to the external system's data and behave similarly to custom objects.

SEE ALSO:

ExternalDataUserAuth

NamedCredential

ExternalDataUserAuth

Stores authentication settings for a Salesforce user to access an external system. The external system must be defined in an external data source or a named credential that's configured to use per-user authentication. This object is available in API version 27.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AuthProviderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system. Only users with the "Customize Application" and "Manage AuthProviders" permissions can view this field. This field is available in API version 39.0 and later.
`ExternalDataSourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce ID of the external data source or named credential that defines the external system.
`Password`	**Type** encrypted string

Field Name	Details
	Properties Create, Nillable, Update **Description** Password portion of the credentials for the Salesforce user to access the external system.
`Protocol`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether to use OAuth, password authentication, or no authentication when the user accesses the external system.
`UserId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** ID of the Salesforce user who's accessing the external system.
`Username`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Username portion of the credentials for the Salesforce user to access the external system.

Usage

These authentication settings enable a Salesforce user to access an external system. The external system is defined in Salesforce as one of the following.

- External data source—Provides access to external objects, whose data is stored outside the Salesforce organization.
- Named credential—Enables the user's actions to trigger authenticated callouts to the endpoint that's specified in the named credential.

If you grant users access to the external data source or named credential via permission sets or profiles, those users can manage their own authentication settings. See “Store Authentication Settings for External Systems” in the Salesforce Help.

SEE ALSO:

ExternalDataSource

NamedCredential

FeedAttachment

Represents an attachment to a feed item, such as a file attachment or a link. Use FeedAttachment to add various attachments to one feed item. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- You can read, create, update, or delete a FeedAttachment only if you have the corresponding access to the associated FeedItem.
- Inline images aren’t creatable, updatable, or deletable through SOAP API.

Fields

Field Name	Details
`FeedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the associated feed entity that contains this attachment. Currently, the only feed entity supported is FeedItem.
`RecordId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the record that this feed attachment contains. For inline images, `RecordId` is a ContentDocument ID. For content attachments, `RecordId` is a ContentVersion ID.
`Title`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The title of this feed attachment. When `Type` is `Link`, `Title` value is the label for the attachment link. Otherwise, `Title` value isn't used.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The type of this feed attachment. Valid values are: • `Content`—A content attachment. • `FeedEntity`—A feed entity, for example, a post that is shared. Available in API version 39 and later in Lightning Experience. • `InlineImage`—An inline image. The system creates an inline image attachment when an image is added to the body of the associated FeedItem. You can't add an inline image directly by using FeedAttachment. • `Link`—A link.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The string value of this FeedAttachment. This field is optional. If the feed attachment is a Link FeedAttachment, the value is the link URL string.

Usage

- This Apex example shows how to add an attachment to a Lead using API version 36.0 and later. First, post a feed item.

```
//create and insert post
FeedItem post = new FeedItem();
post.Body = 'HelloThere';
post.ParentId = 'ID_OF_LEAD_ENTITY';
post.Title = 'FileName';
insert post;
```

  Then insert the attachment.

```
//create and associate a content attachment to the post
FeedAttachment feedAttachment = new FeedAttachment();
feedAttachment.FeedEntityId = post.Id;
```

```
feedAttachment.RecordId = 'ID_OF_CONTENT_VERSION';
feedAttachment.Title = 'FileName';
feedAttachment.Type = 'CONTENT';
insert feedAttachment;
```

- You can only create one link attachment (FeedAttachment of type `Link`) per feed item.
- If the feed item type is one of the following, you can add content or link feed attachments to a FeedItem.
  - `AdvancedTextPost`
  - `TextPost`
  - `ContentPost`
  - `LinkPost`
  - `QuestionPost`
- When a FeedAttachment is added or removed from a feed item, Salesforce updates the type of the feed item to its most appropriate value, as follows.
  - If all content feed attachments are removed from a feed item of type `ContentPost`, the type of this feed item is updated to `TextPost`.
  - Conversely, if a content feed attachment is added to a feed item of type `TextPost`, the type of this feed item is updated to `ContentPost`.
  - If all link feed attachments are removed from a feed item of type `LinkPost`, the type of this feed item is updated to `TextPost`.
  - Conversely, if a link feed attachment is added to a feed item of type `TextPost`, the type of this feed item is updated to `LinkPost`.
  - The type of all other feed items, such as `QuestionPost` or `AdvancedTextPost` feed items, doesn't change when any feed attachments are added or removed.
  - If a content feed attachment is added to a feed item of type `LinkPost`, the feed item type is updated to `ContentPost`.
  - If all content attachments are removed from a feed item of type `ContentPost`, but there's also a link attachment, the feed item type is updated to `LinkPost`.
- Those without administrator privileges can't retrieve a FeedAttachment by its ID in a SOQL query. They can retrieve attachments by specifying the associated `FeedEntityId`, as follows:

```
SELECT Id FROM FeedAttachment WHERE FeedEntityId = 'some_feedItem_id'
```

- Alternatively, retrieve attachments by using a SOQL query on FeedItem with a subquery on the FeedAttachments child relationship, as follows.

```
SELECT Body, (SELECT RecordId, Title, Type, Value FROM FeedAttachments)
FROM FeedItem
WHERE Id = 'some_feedItem_id'
```

- FeedAttachment is not a triggerable object. You can access feed attachments in FeedItem *update* triggers by retrieving them through a SOQL query. For a trigger example, and to learn about trigger considerations for FeedAttachment, see Triggers for Chatter Objects in the *Apex Developer Guide*.

FeedComment

Represents a comment added to a feed by a user. This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Note the following when working with feed comments.

- You must have read access to the feed's parent type to see a FeedComment record.
- You must have access to the feed to add a comment.
- If the comment is related to a user record, the user can delete the comment. For example, if John Smith makes a comment about Sasha Jones, Sasha can delete the comment.
- If the logged-in user has the "Insert System Field Values for Chatter Feeds" user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the logged-in user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the object associated with the feed and delete permission on the parent feed
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

- "Manage Unlisted Groups"

  Only users with this permission can delete items in unlisted groups.

Fields

Field	Details
`CommentBody`	**Type** textarea **Properties** Create, Filter, Sort, Update **Description** The text in the comment.
`CommentType`	**Type** reference **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of comment: • `ContentComment`—an uploaded file on a comment

Field	Details
	• `TextComment`—a direct text entry on a comment Before API version 24.0, a text entry was required on a comment. As of version 24.0, a text entry is optional if the `CommentType` is `ContentComment`.
`FeedItemId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the feed containing the comment.
`HasEntityLinks`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed `CommentBody` includes at least one link to a record. Note: This field is available starting in API version 43.0.
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed `CommentBody` contains rich text. Set `IsRichText` to `true` if you post a rich text feed comment using the SOAP API. Otherwise, the comment is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines.

Field	Details
	• `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only through the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: This attribute is available as of API version 38.0. In API version 38.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 37.0 and prior, all rich text appears as a plain-text representation.
IsVerified	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Determines whether a comment on a question is marked as Company Verified. This field is available in API version 41.0 and later.
LastEditById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the user who last edited the feed comment.
LastEditDate	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** The date the feed comment was last edited.
ParentId	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** ID of a record associated with the feed comment. For example, if you are commenting on a change to a field on Account, `ParentId` is set to the account ID.
`RelatedRecordId`	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentComment`. This field is null for all comments except `ContentComment`. For example, set this field to an existing ContentVersion and post it to a comment as a FeedComment object of `CommentTypeContentComment`.
`Revision`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The number of times the comment was revised.
`Status`	**Type** picklist **Properties** Create, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed comment is published and visible to all who have access to the parent feed item. To make changes to a comment's status, the comment's parent feed item must be in a published state. This field is available in API version 38.0 and later. Possible values are: • `Published`—The comment is visible to all who have access to the parent feed item. • `PendingReview`—The comment is visible to its author and to users who can see the parent feed item and have "ViewAllData" or "CanApproveFeedPostAndComment" permission. The comment can be deleted by its author and users who can see the comment and have "CanApproveFeedPostAndComment" or "ModifyAllData" permission. If the parent feed item is published, the comment can be edited by its author and users who can see the comment and have "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Comment status can be changed from Published to PendingReview and from PendingReview to Published by users who have "CanApproveFeedPostAndComment" or "ModifyAllData" permission.

Field	Details
	Some actions are blocked when a feed comment is pending review: – Select as Best—When a feed comment that is marked as best answer becomes unpublished, it's removed as the best answer. If the comment is published, its best answer status is not restored. – Like and unlike
SystemModstamp	**Type** dateTime **Properties** Defaulted on create, Filter **Description** Date and time when a user or automated process (such as a trigger) last modified this record. SystemModstamp is a read-only system field, available in FeedComment as of API version 37.0.

Usage

- As of API version 23.0 and later, if you have "View All Data" permission, you can query FeedComment records directly without an ID filter. If you don't have "View All Data" permission, you can't query FeedComment records directly, with or without an ID filter.

  For example, the following query returns general information about a feed:

```
SELECT ID, CreatedDate, CreatedById, CreatedBy.FirstName,
           CreatedBy.LastName, ParentId, Parent.Name, Body
FROM FeedItem
WHERE CreatedDate > LAST_MONTH
ORDER BY CreatedDate DESC, Id DESC
```

- You can search for text in comments using SOSL. For example, the following Java class uses `search()` to find the string "foo" in any field of a record:

```
public void searchSample() {
  try {
    SearchResult sr = connection.search("find {foo} in all fields " +
        "returning feedcomment(Id, FeedItemId, CommentBody)");
    // Put the results into an array of SearchRecords
    SearchRecord[] records = sr.getSearchRecords();
    // Check the length of the returned array of records to see
    // if the search found anything
    if (records != null && records.length > 0) {
      System.out.println("Found " + records.length + " comments: ");
      // Display each comment
      for (SearchRecord record : records) {
        FeedComment comment = (FeedComment) record.getRecord();
        System.out.println(comment.getId() + ": " +
            comment.getCommentBody());
      }
    } else {
```

```
        System.out.println("No records were found for the search.");
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

- If you use an Apex trigger to modify the `Body` of a FeedComment object, all mentions hyperlinks are converted to plain text. The mentioned users don't get email notifications.

Note: This object is hard deleted. It isn't sent to the Recycle Bin.

SEE ALSO:

NewsFeed

UserProfileFeed

FeedItem

FeedItem represents an entry in the feed, such as changes in a record feed, including text posts, link posts, and content posts. This object is available in API version 21.0 and later. This object replaces FeedPost.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

- "Manage Unlisted Groups"

  Only users with this permission can delete items in unlisted groups.

Only users with the "Modify All Data" permission can delete a FeedItem of `Type` `TrackedChange`.

If the logged-in user has the "Insert System Field Values for Chatter Feeds" user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the logged-in user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

Fields

Field Name	Details
`BestCommentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The Id of the comment marked as best answer on a question post.
`Body`	**Type** textarea **Properties** Create, Nillable, Sort, Update on page 72 **Description** The content of the FeedItem. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed. Although a value for `Body` is not required for the `ContentPost` type, an attachment is required. If an attachment isn't present, the type changes to `TextPost` or `AdvancedTextPost`, depending on the API version. `TextPost` and `AdvancedTextPost` do require a value for `Body`. Tip: See the `IsRichText` field for a list of HTML tags supported in the body of rich text posts.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.

Field Name	Details
ConnectionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Create, Nillable **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Create, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Create, Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort

Field Name	Details
	Description This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** This field was removed in API version 35.0, and is available in earlier versions for backward compatibility only. This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`HasContent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item has content.
`HasFeedEntity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item has a feed entity, for example, a post, as an attachment. Available in API version 39 and later when sharing a feed entity in Lightning Experience.
`HasLink`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item has a link attached.
`HasVerifiedComment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Determines whether a question has an answer that is marked as Company Verified. This field is available in API version 41.0 and later.
`InsertedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** As of API version 43, a read-only field that indicates whether the Feed Item is open or closed to new actions. A value of `true` places restrictions on the actions a user can take on a feed item and its comments. For more information, see the Usage section.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastEditById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the user who last edited the feed item.
`LastEditDate`	**Type** datetime **Properties** Create, Filter, Nillable, Sort **Description** The date the feed item was last edited.

Field Name	Details
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Create, Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. NetworkScope can have the following values: • NetworkId—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the object type to which the FeedItem object is related. For example, set this field to a UserId to post to someone's profile feed, or an AccountId to post to a specific account.

Field Name	Details
RelatedRecordId	**Type** reference **Properties** Create, Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a RypplePost. This field is typically null for all posts except ContentPost and RypplePost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of Type ContentPost.
Revision	**Type** int **Properties** Create, Filter, Group, Nillable, Sort **Description** The revision number of the feed item.
Status	**Type** picklist **Properties** Create, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is published and visible to all who have access to the feed. This field is available in API version 37.0 and later. Possible values are: • Published—The feed item is visible to all who have access to the feed. • PendingReview—The feed item is visible to its author and to users who can see the item and have "ViewAllData" or "CanApproveFeedPostAndComment" permission. The feed item author and users who can see the item and have "CanApproveFeedPostAndComment" or "ModifyAllData" permission can delete and edit the feed item. Some actions are blocked when a feed item is pending review: – Comment – Like/unlike – Bookmark – Share
Title	**Type** string

Field Name	Details
	Properties Create, Group, Nillable, Sort, Update **Description** The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name. The `Title` field can be updated on posts of `Type` `QuestionPost`.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of FeedItem. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create FeedItem types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed.

Field Name	Details
	• `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values:

Field Name	Details
	• `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

- When a Feed Item's IsClosed field is set to true, some actions are blocked and others are blocked to most users. This table sets out the actions that are blocked when a Feed Item is closed.

Action	Availability on a Closed Conversation
Add a comment	Blocked
Answer a question	Blocked
Vote on a poll	Blocked
Edit a feed item or its comments or answers	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission Editing is blocked specifically for the feed item title, feed item body, and feed content body fields.
Edit a topic	Available
Delete a feed item or its comments or answers	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission
Publish a pending review comment (community moderation)	Available to admins and moderators
Like or unlike; upvote or downvote	Available
Select or remove a best answer	Blocked to author; available to admins, moderators, and people with the Close Conversation Threads in Feeds permission
Company verify; remove verification	Available only to people with the Verify Answers to Chatter Questions permission
Flag	Available
Share	Available
Bookmark	Available

Action	Availability on a Closed Conversation
Mute and unmute	Available
Escalate to case	Available only to people permitted to escalate a feed item to a case

- This Apex example shows how to add an attachment to a Lead using API version 36.0 and later. First, post a feed item.

```
//create and insert post
FeedItem post = new FeedItem();
post.Body = 'HelloThere';
post.ParentId = 'ID_OF_LEAD_ENTITY';
post.Title = 'FileName';
insert post;
```

  Then insert the attachment.

```
//create and associate a content attachment to the post
FeedAttachment feedAttachment = new FeedAttachment();
feedAttachment.FeedEntityId = post.Id;
feedAttachment.RecordId = 'ID_OF_CONTENT_VERSION';
feedAttachment.Title = 'FileName';
feedAttachment.Type = 'CONTENT';
insert feedAttachment;
```

- If you are using API version 23.0 or later and have “View All Data” permission, you can directly query for a FeedItem. The following example returns the 20 most recent feed items.

```
SELECT ID, CreatedDate, CreatedById, CreatedBy.FirstName, CreatedBy.LastName, ParentId,
 Parent.Name, Body,
 (SELECT ID, FieldName, OldValue, NewValue FROM FeedTrackedChanges ORDER BY ID DESC)
FROM FeedItem
WHERE CreatedDate > LAST_MONTH
ORDER BY CreatedDate DESC
```

- If you are using an earlier API version than version 23.0, query FeedItem objects through a feed (such as AccountFeed or OpportunityFeed). The following example returns all feed items for a given account, ordered by date descending:

```
SELECT Id, Type, FeedItem.Body
FROM AccountFeed
WHERE ParentId = AccountId ORDER BY CreatedDate DESC
```

  Note: Provide the `ParentId` for API version 22.0 and earlier.

- A FeedItem of type `UserStatus` is automatically created when a user adds a post to update the status. You can’t explicitly create a FeedItem of type `UserStatus`.
- The FeedItem object doesn’t support aggregate functions in queries.
- If the logged-in user has the “Insert System Field Values for Chatter Feeds” user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the logged-in user can set these fields to the original post’s author and creation date. The fields can’t be updated after migration.
- The size limit for an attachment on a profile or news feed is 25 MB.
- The size limit for an attachment on a record feed is 5 MB.

- You can't use the content fields to update or delete the content.
- You can't filter or update the content fields.
- Deleting a FeedItem via the API also deletes the associated content. Likewise, undeleting a FeedItem restores associated content.

  Note: This object is hard deleted. It isn't sent to the Recycle Bin.

- After uploading to a feed, it is possible for an attachment or document to be deleted, marked private, or hidden by sharing rules. In this case, all content fields in a FeedItem object appear as `null` in a SOQL query.
- You can't explicitly create or delete a FeedTrackedChange record.
- If you insert a FeedItem or FeedComment of `Type ContentPost` on a User or Group to create a file, the `NetworkScope` field value of the FeedItem is passed to the file.
- If you use an Apex trigger to modify the `Body` of a FeedItem object, all mentions hyperlinks are converted to plain text. The mentioned users don't get email notifications.
- If you insert rich text into the feed item body, make sure that the case of the opening and closing HTML tags matches. For example, `<b>This is bold text</B>` generates an error.
- To check file sharing with Apex triggers, write triggers on ContentDocumentLink instead of FeedItem. For a ContentDocumentLink trigger example, see ContentDocumentLink.
- In API version 36.0 and later, use FeedAttachment to attach one or more content items to a FeedItem. As a result of multiple attachment support through FeedAttachment, all fields related to content attachments have been removed. These fields are: `ContentData`, `ContentDescription`, `ContentFileName`, `ContentSize`, and `ContentType`.

FeedLike

Indicates that a user has liked a feed item. This object is available in API version 21.0 and later.

FeedLike records represent likes on posts and not likes on comments. Likes on comments can't be queried via the API. A FeedLike is a child object of an associated FeedItem, FeedTrackedChange, or object feed, such as AccountFeed.

Supported Calls

`create()`, `delete()`, `describeSObjects()`

Special Access Rules

If the logged-in user has the "Insert System Field Values for Chatter Feeds" user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the logged-in user can set these fields to the original post's author and creation date. The fields can't be updated after migration.

Fields

Field Name	Details
`FeedItemId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the feed item that the user liked.
`FeedEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Id of a feed item or feed comment the user liked. If the user liked a comment, FeedEntityId is set to the ID of the comment. If the user liked a feed item, FeedEntityId is set to the ID of the feed item. FeedEntityId is an optional field. The default value is the ID of the feed item.
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.

Usage

You can't query FeedLike records directly. They can only be queried via the entity feed, such as AccountFeed.

FeedLike records represent likes on posts and not likes on comments. Likes on comments can't be queried via the API.

FeedPollChoice

Shows the choices for a poll posted in the feed. This object is available in API version 29.0 and later.

Supported Calls

`query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

- "Manage Unlisted Groups"

  Only users with this permission can delete items in unlisted groups.

Fields

Field Name	Details
ChoiceBody	**Type** string **Properties** Group **Description** A choice in the poll.
FeedItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the feed item for the poll.
Position	**Type** int **Properties** Group, Sort **Description** Shows the position of the poll choice.

Usage

Use this object to query all of the choices associated with a particular poll. To view how people voted on the poll, see the FeedPollVote object.

FeedPollVote

Shows how users voted on a poll posted in the feed. This object is available in API version 29.0 and later.

Supported Calls

`query()`, `retrieve()`

Fields

Field Name	Details
`ChoiceId`	**Type** reference **Properties** Filter, Group **Description** Indicates which choice a user selected on a poll posted in a feed.
`FeedItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the feed item for the poll.

Usage

Use this object to query how users voted on a particular poll.

FeedPost

FeedPost represents the following types of changes in a record feed, such as AccountFeed: text posts, link posts, and content posts. This object is available in API version 18.0 through 21.0. FeedPost is no longer available in later versions. Starting with API version 21.0, use FeedItem to represent text posts, link posts, and content posts in feeds.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `search()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

> Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Only users with the “Modify All Data” permission can delete a FeedItem of `Type` `TrackedChange`.

If the logged-in user has the “Insert System Field Values for Chatter Feeds” user permission, the `create` field property is available on `CreatedBy` and `CreatedDate` system fields. During migration, the logged-in user can set these fields to the original post’s author and creation date. The fields can’t be updated after migration.

Fields

Field	Details
`Body`	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The content of the FeedPost. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`ContentData`	**Type** base64 **Properties** Create, Nillable **Description** This field is required if `Type` is `ContentPost`. Encoded file data in any format, and can’t be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** string **Properties** Create, Nillable, Sort **Description** The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Create, Group, Nillable, Sort **Description** This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int

Field	Details
	Properties Group, Nillable, Sort **Description** This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the feed containing the FeedPost.
`InsertedById`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). This field is a standard system field.
`LinkUrl`	**Type** url **Properties** Create, Filter, Nillable, Sort

Field	Details
	Description The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the object type to which the FeedPost is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The title of the FeedPost. When the `Type` is `LinkPost`, the `Body` is the URL and the `Title` is the label for the link.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of FeedPost: • `UserStatus`—automatically generated when a user updates their status • `TrackedChange`—ignore • `TextPost`—a direct text entry on a feed • `LinkPost`—a URL posting on a feed • `ContentPost`—an uploaded file on a feed Note: If you set `Type` to `ContentPost`, you must specify `ContentData` and `ContentFileName`.

Usage

- You can't directly query for a FeedPost. FeedPosts are always associated with a feed item, so you can query for them through the feeds. The following example returns all feed items for a given account, ordered by date descending:

```
SELECT Id, Type, FeedPost.Body
FROM AccountFeed
WHERE ParentId = AccountId ORDER BY CreatedDate DESC
```

- A FeedPost of type `UserStatus` is automatically created when a user adds a post to update the current status. You can't explicitly create a FeedPost of type `UserStatus`.
- The size limit for an attachment on a profile, news, or record feed is 2 GB.
- You can't use the content fields to update or delete the content.
- You can't filter or update the content fields.
- Deleting a FeedPost via the API also deletes the associated content and FeedPost objects. Likewise, undeleting a FeedPost restores associated content and FeedPost objects.

  Note: This object is hard deleted. It isn't sent to the Recycle Bin.

- After uploading to a feed, it is possible for an attachment or document to be deleted, marked private, or hidden by sharing rules. In this case, all content fields in FeedPost appear as `null` in a SOQL query.
- You can't explicitly create or delete a FeedTrackedChange record.

FeedRevision

Holds the revision history of a specific feed item or comment, including a list of attributes that changed for each revision. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Action`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Holds the type of modification to the underlying feed item or comment attribute. `Action` can have the value `Changed`.
`EditedAttribute`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Identifies the part of the feed item or comment which was modified. A single revision can have many edited attributes.
FeedEntityId	**Type** reference **Properties** Filter, Group, Sort **Description** Identifies the modified feed item or comment.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). This field is a standard system field.
IsValueRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>`

Field Name	Details
	• `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
OriginNetworkId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the community in which a user modified the feed item or comment. This field is only available, if Salesforce Communities is enabled for your organization.
Revision	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The revision number of the feed item or comment.
Value	**Type** textarea **Properties** Nillable **Description** Identifies the value of the `EditedAttribute` field before the update.

Usage

This object tracks the changes made to a feed item or feed comment and stores a list of attributes that changed for each revision.

- To query the FeedRevision object, users need the “View All Data” permission or supply a WHERE clause on the `FeedEntityId`.

FeedTrackedChange

Represents an individual field change or set of field changes. A FeedTrackedChange is a child object of a record feed, such as AccountFeed This object is available in API version 18.0 and later..

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Group, Restricted picklist, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO currency code for the field, if `FieldName` is a currency field.
`FeedItemId`	**Type** reference **Properties** Group, Sort, Filter **Description** ID of the parent feed that tracks the field change.
`FieldName`	**Type** string **Properties** Group, Sort **Description** The name of the field that was changed. Note: This field also tracks other events that are not related to an individual field for a parent feed. These events occur as the parent record advances through its pipeline. For example, a value of `leadConverted` indicates that a lead has been converted to an opportunity. For a full list of values, see Tracking of Special Events.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field	Details
	Description The new value of the field that was changed.
`OldCurrencyIsoCode`	**Type** string **Properties** Group, Nillable, Sort **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO currency code for the `OldValue` field, if `FieldName` is a currency field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The last value of the field before it was changed.

Usage

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

If you move a custom field to the Recycle Bin, all FeedTrackedChange records that track historical changes to the custom field are automatically deleted and are not restored if the custom-field is undeleted.

The following sections outline the difference between standard feeds and custom feeds.

Standard Feeds

A standard feed is a record feed, such as AccountFeed. FeedTrackedChange records for standard feeds can only be queried via the parent feed object.

Note the following when working with standard feed items:

- Feed items for standard feeds are read only in the API.
- A FeedTrackedChange record is visible when you have read access on the record feed, and when the field in the FeedTrackedChange is visible in the field-level security settings.

Custom Feeds

If you want more control over the information provided in a record feed, such as AccountFeed, you can create a custom feed. A custom feed can replace or augment an existing record feed. For example, you might want to:

- Disable the standard account record feed and use an Apex trigger to generate FeedTrackedChange records for the events that you want to track in the feed instead.
- Augment the standard contact record feed by writing an API client that inserts feed items for events that are not tracked in the standard feed.

Tracking of Special Events

The `FieldName` field also tracks other events that are not related to an individual field for a parent feed. These events occur as the parent record advances through its pipeline. For example, a value of `leadConverted` indicates that a lead has been converted to an opportunity.

Valid values for the `FieldName` field for multiple objects:

- `created`
- `ownerAccepted`
- `ownerAssignment`

Additional valid values for the `FieldName` field for individual objects:

Account

- `accountCreatedFromLead`
- `accountMerged`
- `accountUpdatedByLead`
- `personAccountUpdatedByLead`

Case

- `closed`
- `ownerEscalated`

Contact

- `contactCreatedFromLead`
- `contactMerged`
- `contactUpdatedByLead`

Contract

- `contractActivation`
- `contractApproval`
- `contractConversion`
- `contractExpiration`
- `contractTermination`

Lead

- `leadConverted`
- `leadMerged`

Opportunity

- `opportunityCreatedFromLead`

SEE ALSO:

NewsFeed

UserProfileFeed

FieldHistoryArchive

Represents field history values for all objects that retain field history. `FieldHistoryArchive` is a big object, available only to users with the "Retain Field History" permission. This object is available in API version 29.0 and later.

Each instance of the `FieldHistoryArchive` object represents a single change in the value of a field. `FieldHistoryArchive` stores history for both standard and custom fields.

The `Field` field returns the name of the field unless the parent field or object is deleted, in which case it returns the field ID. You can use the ID to retrieve the old field and object name from the `FieldNameAfterArchival` and `ParentNameAfterArchival` fields, respectively.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`ArchiveFieldName`	**Type** string **Properties** Nillable **Description** The name of the field at the time the data was archived. If the field name changed, the name is sometimes not the same for all records related to a single field.
`ArchiveParentName`	**Type** string **Properties** Nillable **Description** The name of the parent object at the time the data was archived. If the object name changed, the name is sometimes not the same for all records related to a single field.

Field Name	Details
`ArchiveParentType`	**Type** string **Properties** Nillable **Description** The type of the field at the time the data was archived. If the field type changed, the type is sometimes not the same for all records related to a single field.
`ArchiveTimestamp`	**Type** dateTime **Properties** Nillable **Description** The date and time at which the data was archived.
`CreatedById`	**Type** reference **Properties** Nillable **Description** The user ID of the user who created the original record.
`CreatedDate`	**Type** dateTime **Properties** Nillable, Sort **Description** The date and time at which the original record was created.
`Field`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** The name of the field that was changed. If the field is deleted from the parent object, the `Field` field contains the field ID instead.
`FieldHistoryType`	**Type** picklist **Properties** Nillable, Sort, Restricted picklist

Field Name	Details
	Description The name of the object that contains the field history (for example, Account).
`HistoryId`	**Type** reference **Properties** Filter, Sort **Description** The ID of the relevant history object (for example, AccountHistory). This field is available in versions 42.0 and later.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, idLookup **Description** The ID of the archived record. It's useful to have a field's ID for fields that you've deleted. (Field names aren't retained in history when you delete fields from Salesforce.)
`NewValue`	**Type** anyType **Properties** Nillable **Description** The new value of the modified field.
`OldValue`	**Type** anyType **Properties** Nillable **Description** The previous value of the modified field.
`ParentId`	**Type** reference **Properties** Filter, Nillable, Sort **Description** The ID of the object that contains the field (the parent object).

Usage

When sorting fields, order them as follows:

1. `FieldHistoryType ASC`
2. `ParentID ASC`
3. `CreatedDate DESC`

FieldPermissions

Represents the enabled field permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

To grant a user access to a field, associate a FieldPermissions record with a PermissionSet that's assigned to a user. FieldPermissions records are only supported in PermissionSet, not in Profile.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The field's API name. This name must be prefixed with the `SobjectType`. For example, `Merchandise__c.Description__c`
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The `Id` of the field's parent PermissionSet.
`PermissionsEdit`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, users assigned to the parent PermissionSet can edit this field. Requires `PermissionsRead` for the same field to be `true`.

Field Name	Details
`PermissionsRead`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, users assigned to the parent PermissionSet can view this field. A FieldPermissions record must have at minimum `PermissionsRead` set to `true`, or it will be deleted.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object's API name. For example, `Merchandise__c`.

Usage

FieldPermissions work similarly to ObjectPermissions. However, FieldPermissions includes a `Field` attribute to return the name of the field.

For example, the following query returns all FieldPermissions records that have at least the "Read" permission. The results include the field, object, and permission set names.

```
SELECT SobjectType, Field, PermissionsRead, Parent.Name
FROM FieldPermissions
WHERE PermissionsRead = True
```

Include the field's parent object when querying FieldPermissions. For example, to find all rows that match the Account object's `Type` field, create the following query:

```
SELECT Id, SobjectType, Field
FROM FieldPermissions
WHERE Field = 'Account.Type' AND SobjectType = 'Account'
```

To find which permission sets are backed by profiles with the Account object, you can use a query similar to this:

```
SELECT Id, ParentId, SobjectType, Field, PermissionsEdit, PermissionsRead, Parent.Name
FROM FieldPermissions
WHERE SobjectType = 'Account' and Parent.IsOwnedByProfile = true
ORDER BY SObjectType, Field
```

Both `SobjectType` and `Field` must be included in the `SELECT` line of the query. You must also provide the full API name of the field in the form of `SobjectType.Field` when querying for a field.

Note: When using the FieldPermission object to download records, depending on the SOQL query you use, you might not receive all expected records. Results might also appear incomplete. However, all records do download; fields that don't support field security and rows for entities not visible to the org are hidden.

Special Properties for Field Permissions

The auto-number and formula fields have special rules for how field permissions work. Both have FieldPermissions records, but inserting and updating is limited to `PermissionsRead`. `PermissionsEdit` isn't allowed for either field type, since these fields must be read-only for users.

The following field types don't return a FieldPermissions record because they are assumed to always be readable.

- `Id`
- `CreatedById`
- `CreatedDate`
- `IsDeleted`
- `LastModifiedById`
- `LastModifiedDate`
- `SystemModStamp`

The following field types don't return a FieldPermissions record because they are assumed to always be readable and writable.

- `OwnerId`
- Master-detail custom (relationship) fields
- Universally required custom fields

As a result, the following query returns no records, even though users do have some access to some of the fields.

```
SELECT Field, SobjectType, PermissionsRead
FROM FieldPermissions
WHERE Field='Id'
```

To determine if a field can return a FieldPermissions record, you can call a `describeSObject()` on the field. For example, `describeSObject('Merchandise__c')`, returns all the properties of the Merchandise custom object, including field properties. If you're using a field whose `permissionable` property is `false` (such as any of the field types listed in this section), you can't query, insert, update, or delete any field permissions records, because none exist.

Working with Custom Activity Fields

While tasks and events are considered separate objects, they share a common set of activity custom fields. As a result, when a custom task field is created, a custom event field is also created, and vice versa. You can display the custom field on the event layout, task layout, or both event and task layouts.

Although custom activity fields are shared between tasks and events, you'll see separate FieldPermissions records for the task and event. However, changes made to one field permission record are automatically made to the other. For example, if you create a custom activity field, assign field permissions to it in a permission set, and run the following query, the query will return two records with the same permission value.

```
SELECT Field, Id, ParentId, PermissionsEdit, PermissionsRead, SobjectType
FROM FieldPermissions
WHERE SobjectType = 'event' OR SobjectType ='task'
```

If you then update one of the records with a different set of field permission values and run the query again, the same permission values for both records are returned.

Nesting Field Permissions

You can nest FieldPermissions in a PermissionSet query. For example, the following returns any permission sets where "Edit Read Only Fields" is `true`. Additionally, the result set will include both the "Read" and "Edit" field permission on the Merchandise object. This is done by nesting the SOQL with a field permission query using the relationship name for field permissions: `FieldPerms`.

```
SELECT PermissionsEditReadonlyFields,
(SELECT SobjectType, Field, PermissionsRead, PermissionsEdit
FROM FieldPerms
WHERE SobjectType = 'Merchandise__c')
FROM PermissionSet
WHERE PermissionsEditReadonlyFields = true
```

As a result, it's possible to traverse the relationship between the PermissionSet and any child related objects (in this case, FieldPermissions). You can do this from the PermissionSet object by using the child relationship (`ObjectPerms`, `FieldPerms`, and so on) or from the child object by referencing the PermissionSet with `Parent.`***`permission_set_attribute`***.

It's important to consider when to use a conditional `WHERE` statement to restrict the result set. To query based on an attribute on the permission set object, nest the SOQL with the child relationship. However, to query based on an attribute on the child object, you must reference the permission set parent attribute in your query.

The following two queries return the same columns with different results, based on whether you use the child relationship or parent notation.

```
SELECT PermissionsEditReadonlyFields,
(SELECT SobjectType, Field, PermissionsRead, PermissionsEdit
FROM FieldPerms
WHERE SobjectType = 'Merchandise__c')
FROM PermissionSet
WHERE PermissionsEditReadonlyFields = true
```

versus:

```
SELECT SobjectType, Field, PermissionsRead, PermissionsEdit, Parent.Name,
   Parent.PermissionsEditReadonlyFields
FROM FieldPermissions
WHERE SObjectType='Merchandise__c'
```

SEE ALSO:

PermissionSet

ObjectPermissions

FieldServiceMobileSettings

Represents a configuration of settings that control the Field Service Lightning iOS and Android mobile app experience. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`BgGeoLocationAccuracy`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Controls the accuracy of geolocation tracking of services resources while the app is running in the background. Lowering accuracy reduces battery consumption for mobile devices. Available in API version 41.0 and later. Picklist options: 1. Medium: Accurate to within about 100 meters. The API name for this value is `Medium`. 2. Coarse: Accurate to within about 1 kilometer. The API name for this value is `Coarse`. 3. Very Coarse: Accurate to within about 3 kilometers. The API name for this value is `VeryCoarse`.
`BgGeoLocationMinUpdateFreqMins`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls the frequency of geolocation poling of services resources while the app is running in the background. Less frequent poling decreases battery consumption for mobile devices. The label in the UI is Minimum Update Frequency of Geo Location in Minutes (Background). Available in API version 41.0 and later.
`BrandInvertedColor`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of toasts and the contrast color of the floating action button.
`ContrastInvertedColor`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The color of secondary backgrounds in the UI.
ContrastPrimaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of primary text.
ContrastQuaternaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of secondary lines that delineate different areas of the UI.
ContrastQuinaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of primary backgrounds in the UI.
ContrastSecondaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of secondary text.
ContrastTertiaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of the icons on the settings screen and of primary lines that delineate different areas of the UI.
DefaultListViewDeveloperName	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The API name of the default service appointment list view on the schedule screen.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The API name of the set of field service mobile settings.
FeedbackPrimaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of error messages.
FeedbackSecondaryColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of success messages.
FeedbackSelectedColor	**Type** string **Properties** Create, Defaulted on create, Group, Sort, Update **Description** The color indicating the user’s current selection.
FutureDaysInDatePicker	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days into the future that a user can select from the date picker on the schedule screen.

Field Name	Details
GeoLocationAccuracy	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The accuracy of service resource geolocation tracking. Lowering accuracy reduces battery consumption for mobile devices. Picklist values: • Fine: Accurate to within 10 meters. The API name for this value is `Fine`. • Medium: Accurate to within 100 meters. The API name for this value is `Medium`. • Coarse: Accurate to within 1 kilometer. The API name for this value is `Coarse`.
GeoLocationMinUpdateFreqMins	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The minimum number of minutes between attempts to poll geolocation.
IsDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the set of field service mobile settings is the default set that is automatically assigned to users. You cannot make a different settings record the default, but you can modify the default settings record. Available in API version 41.0 and later.
IsSendLocationHistory	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether geolocation tracking of services resources is enabled.
IsShowEditFullRecord	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Controls whether users can edit records with the field service mobile app.

Field Name	Details
`IsUseSalesforceMobileActions`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** When this option is set to true, records in the Field Service Lightning mobile app display mobile and Lightning Experience actions instead of app extensions and Salesforce Classic Publisher actions. To manage the actions that appear on a record, navigate to the record's detail page layout from the full Salesforce site. Then, customize the actions in the Salesforce Mobile and Lightning Experience Actions section.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The localization preference for a user.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label in the UI for the set of field service mobile settings. Available in API version 41.0 and later.
`MetadataCacheTimeDays`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days that org metadata, such as layouts, is kept in the app's local cache of memory.
`NavbarBackgroundColor`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of the top bar in the app.

Field Name	Details
NavbarInvertedColor	**Type** string **Properties** Create, Defaulted on create, Group, Sort, Update **Description** The secondary color of the tap bar in the app.
PastDaysInDatePicker	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of days into the past that a user can select from the date picker on the schedule screen.
PrimaryBrandColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The main branding color used throughout the UI.
RecordDataCacheTimeMins	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of minutes that record data is kept in the app's local cache of memory.
SecondaryBrandColor	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The color of action buttons.
TimeIntervalSetupMins	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Controls the spacing of picklist options for time values such as when creating resource absences.
`UpdateScheduleTimeMins`	**Type** int **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The number of minutes between attempts to update a user's schedule.

Usage

Field Service Mobile settings allow you to create sets of settings to apply to different field service mobile users. The settings apply to both the Android and iOS versions of the app.

For example, suppose you want to accommodate workers that are color blind, or who work in particularly dark or bright conditions. You can choose different branding options for different workers to suit their needs, and assign them to their profiles.

FiscalYearSettings

Settings to define a custom or standard fiscal year for your organization. This object has a parent-child relationship with the Period object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Description of the setting.

Field	Details
EndDate	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** End date of the fiscal year.
IsStandardYear	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the fiscal year is a standard calendar year (`true`) or a custom fiscal year (`false`).
Name	**Type** string **Properties** Filter, Group, Sort **Description** A name for the fiscal year. Limit: 80 characters.
PeriodId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the associated fiscal period.
PeriodLabelScheme	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for fiscal periods.
PeriodPrefix	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field	Details
	Description The prefix of fiscal periods. For example, if `p` is the prefix, then the first period is “P1.”
`QuarterLabelScheme`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for fiscal quarters.
`QuarterPrefix`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The prefix of fiscal quarters. For example, if “Q” is the prefix, then the fourth quarter would be “Q4.”
`StartDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Start date of the fiscal year.
`WeekLabelScheme`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The numbering scheme used for weeks.
`WeekStartDay`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The name of the day that starts the week, for example `Monday` or `Sunday`
`YearType`	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates one of two types of fiscal years, Standard or Custom. Standard denotes the standard Gregorian calendar, while Custom means a fiscal year with a custom structure.

SEE ALSO:
Period
Object Basics

FlexQueueItem

Represents an asynchronous Apex job in the Apex flex queue. Provides information about the job type and flex queue position of the AsyncApexJob. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Description
`AsyncApexJobId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of an AsyncApexJob that's waiting in the flex queue.
`FlexQueueItemId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The primary key for this FlexQueueItem.
`JobPosition`	**Type** int

Field Name	Description
	Properties Filter, Group, Sort **Description** The position in the flex queue of the waiting job. The highest-priority job in the queue is at position 0.
`JobType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the job. Valid values are: • `ApexToken` • `BatchApex` • `BatchApexWorker` • `Future` • `Queueable` • `ScheduledApex` • `SharingRecalculation` • `TestRequest` • `TestWorker` Currently, queries are supported only on `BatchApex` jobs.

Usage

To find the position of an AsyncApexJob in the flex queue, query `JobPosition`. For example:

```
SELECT JobPosition FROM FlexQueueItem WHERE JobType = 'BatchApex' AND AsyncApexJobId =
'707xx000000DABC'
```

To find the job at a given position, query `AsyncApexJobId`. For example:

```
SELECT AsyncApexJobId FROM FlexQueueItem WHERE JobType = 'BatchApex' AND JobPosition = '2'
```

To find all batch jobs in the flex queue, query `JobType`. To get other information about the jobs, include AsyncApexJob in your query. For example:

```
SELECT JobType, JobPosition, AsyncApexJob.ApexClass.Name, AsyncApexJob.CreatedDate,
    AsyncApexJob.CreatedBy FROM FlexQueueItem WHERE JobType='BatchApex' AND
    AsyncApexJob.ApexClass.Name LIKE '%'BatchAJob'%' ORDER BY JobPosition DESC
```

FlowInterview

Represents a flow interview. A *flow interview* is a running instance of a flow.

Supported Calls

`delete()`, `describeLayout()`, `describeSObject()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To delete a flow interview, you must have the "Manage Flow" user permission. All other calls require the "Run Flows" user permission or the `Flow User` field enabled on the user detail page.

Fields

Field Name	Details
`CurrentElement`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The flow element at which the interview is currently paused or waiting.
`Guid`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Globally unique identifier for the interview.
`InterviewLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Label for the interview. This label helps users and administrators differentiate interviews from the same flow. In the user interface, this label appears in the Paused Flow Interviews component on the user's Home tab and in the Paused and Waiting Interviews list on the flow management page.
`Name`	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name for the interview.
`OwnerId`	**Type** ID **Properties** Filter, Group, Sort **Description** The ID of the user who owns the interview. Only this user or an admin can resume the interview.
`PauseLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Information about why the interview was paused. This string is entered by the user who paused the flow interview. The label is **Why Paused**

FlowInterviewOwnerSharingRule

Represents the rules for sharing a FlowInterview with users other than the owner. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are:

Field	Details
	• `Read` • `Edit`—In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.

Field	Details
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group that's given access.

Usage

Use this object to manage the sharing rules for FlowInterview records. General sharing uses this object.

In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. When that setting is disabled, only the owner or a flow admin can resume a flow interview. To disable this setting, go to your org's Process Automation Settings in Setup.

FlowInterviewShare

Represents a sharing entry on a FlowInterview. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the FlowInterview. The possible values are: • `Read` • `Edit`—In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. • `All`—This value is not valid for creating or deleting records.

Field	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the FlowInterview associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). Valid values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the FlowInterview with them. • `Owner`—The User is the owner of the FlowInterview. • `Rule`—The User or Group has access via a FlowInterview sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the FlowInterview. This field can't be updated.

Usage

This object lets you determine which users and groups can view and edit flow interviews that are owned by other users.

In API version 42.0 and later, when **Let users resume shared flow interviews** is enabled for your org, users can resume all flow interviews that they have edit access to. When that setting is disabled, only the owner or a flow admin can resume a flow interview. To disable this setting, go to your org's Process Automation Settings in Setup.

FlowRecordRelation

Represents a relationship between a record and a flow interview. When a flow interview is paused, Salesforce uses the $Flow.CurrentRecord system variable in the flow to associate the interview with a record. Available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this relation.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The flow interview that the record is related to.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The record that the flow interview is related to. Make sure that this field contains only one ID, and that the ID is for a valid object. Custom objects and most standard objects are supported. To confirm whether an object is supported, see the Reference To property for this field in Workbench.

FlowStageRelation

Represents a relationship between a paused flow interview and its stages. When a flow interview is paused, Salesforce creates a FlowStageRelation record for each stage that's set to the `$Flow.CurrentStage` or `$Flow.ActiveStages` system variable. Available in API version 43.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this relation.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The flow interview that the record is related to.
`StageLabel`	**Type** string **Properties** Filter, Nillable, Sort **Description** Label for the stage. If the stage is translated, the label respects the language of the user who is querying the label.
`StageOrder`	**Type** int **Properties** Filter, Group, Sort **Description** The order of this stage when the flow interview was paused. This order may differ from the order in the stage definition. • If the type is Active, the order corresponds to the order of the stage in `$Flow.ActiveStages`. • If the type is Current and corresponds to an active stage, the order matches the order of the active stage. • If the type is Current and doesn't correspond to an active stage, the order is 0.
`StageType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description Type of stage. The valid values are: • Current: Identifies that the stage is set to `$Flow.CurrentStage`. • Active: Identifies that the stage is set to `$Flow.ActiveStages`.

Usage

You can use the FlowStageRelation records to represent the paused interview and its active and current stages visually.

For example, an Online Purchasing flow interview starts with several stages in $Flow.ActiveStages. If the interview is paused, Salesforce creates a FlowStageRelation record for each stage in `$Flow.ActiveStages` or `$Flow.CurrentStage`.

StageLabel	StageType	StageOrder
Review Cart	Active	0
Shipping Details	Active	1
Billing Details	Active	2
Payment Details	Active	3
Order Confirmation	Active	4
Shipping Details	Current	1

Folder

Represents a repository for a Document, EmailTemplate, Report, or Dashboard. Only one type of item can be contained in a folder.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- You must have the "Modify All Data" permission to create, update, or delete document folders and email template folders.
- Customer Portal users can't access this object.
- To query this object, no special permissions are needed.
- As of API version 35.0, when a folder is shared with a role, it is only visible to users in that role. Superior roles in the role hierarchy don't gain visibility.
- If analytics folder sharing is turned on, then users need these permissions to create and manage report folders and dashboard folders:
  - "`Create Dashboard Folders`"

– `"Create Report Folders"`

Fields

Field	Details
`AccessType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Indicates who can access the Folder. Available values include: • `Hidden`—Folder is hidden from everyone. • `Public`—Folder is accessible by all users. • `Shared`—Folder is accessible only by a User in a particular Group or UserRole. The API doesn't allow you to view, insert, or update which group or Role the Folder is shared with. Note: If analytics folder sharing is turned on for your organization, then this field is present but not used.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Folder Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsReadonly`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this Folder is read-only (`true`) or editable (`false`). Label is *`Read Only`*.

Field	Details
	Note: If analytics folder sharing is turned on for your organization, then this field is present but not used.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the folder as it appears in the user interface. Label is **Document Folder Label**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. Type of objects contained in the Folder. This field can't be updated. Available values include: • `Dashboard` • `Document` • `Email template` • `Report`

Usage

Only one type of item can be contained in a folder, either Document, EmailTemplate, Report, or Dashboard.

SEE ALSO:

Object Basics

FolderedContentDocument

Represents the relationship between a parent and child ContentFolderItem in a ContentWorkspace.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ContentDocument that can be in a folder.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** File size of the ContentDocument.
`FileExtension`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the ContentDocument.
`FileType`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** File type of the ContentDocument.
`IsFolder`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the FolderedContentDocument is a folder, rather than a file.
`ParentContentFolderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the ContentFoldr the ContentDocument resides in.
`Title`	**Type** string **Properties** Filter, Group, Sort **Description** Name of the file or folder in a ContentFolder.

ForecastingAdjustment

This object represents an individual sales manager's adjustment for a subordinate's forecast via a ForecastingItem. Available in API versions 26 and greater. This object is separate from the ForecastingOwnerAdjustment object, which represents forecast users' adjustments of their *own* forecasts.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AdjustedAmount	**Type** double **Properties** Create, Filter, Sort, Update **Description** The revenue amount of an individual forecast item, after an adjustment.
AdjustedQuantity	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity amount of an individual forecast item, after an adjustment. This field is available in API version 28 and later.
AdjustmentNote	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A text note providing information about the adjustment. The maximum length is 140 characters. This field does not appear in reports.
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The currency code of the adjustment. If omitted, the default is the importing user's personal currency.
ForecastCategoryName	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category within the sales cycle that an opportunity is assigned to based on its opportunity stage. The standard forecast categories are Pipeline, Best Case,

Field Name	Details
	Commit, Omitted, and Closed. You can customize forecast category names. The forecast categories display information for that specific category; for example, Best Case only reflects amounts in the Best Case category.
`ForecastingItemCategory`	**Type** picklist **Properties** Create, Filter, Group, Sort **Description** This field indicates which type of forecast rollup the manager adjustment belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable. ***Either cumulative or individual forecast category rollups:*** • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories. When inserting manager adjustments, the values you insert for `ForecastCategoryName` and `ForecastingItemCategory` must be compatible with each other. In organizations using cumulative forecast rollups, the `ForecastCategoryName` is nillable. These are the valid pairs.

Field Name	Details
	Individual forecast category rollups: • `ForecastCategoryName`: BestCase, `ForecastingItemCategory`: BestCaseOnly • `ForecastCategoryName`: Commit, `ForecastingItemCategory`: CommitOnly **Cumulative forecast category rollups:** • `ForecastCategoryName`: null, `ForecastingItemCategory`: BestCaseForecast • `ForecastCategoryName`: null, `ForecastingItemCategory`: CommitForecast
ForecastingTypeId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related ForecastingType.
ForecastingItemId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ForecastingItem.
IsAmount	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
IsQuantity	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.

Field Name	Details
OwnerId	**Type** reference **Properties** Create,Defaulted on create, Filter, Group, Sort **Description** The ID of the forecast owner.
PeriodId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the adjustment. Read only.
ProductFamily	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The Product Family for the adjustment. Read only. This field is available in API version 29 and later.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort **Description** The start of the adjustment, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.
Territory2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to obtain a manager's adjustment detail for a specified ForecastingItem. The ForecastingAdjustment object itself is visible to all users, but only forecast managers and users above them in the forecast hierarchy can read or write ForecastingAdjustment records.

> **Note:** Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:

ForecastingFact

ForecastingItem

ForecastingQuota

ForecastingDisplayedFamily

Represents the table in Forecasts Settings where an admin selects the product families that users can forecast on in Lightning Experience. This object is available in API version 40.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DisplayPosition`	**Type** int **Properties** Filter, Group, idLookup, Nillable, Sort **Description** The order in which product families are displayed on the forecasts page. Each value is unique to a product family.
`ProductFamily`	**Type** picklist **Properties** Filter, Group, Sort **Description** The product family available to forecast on. Each product family is unique.

ForecastingFact

This is a read-only object linking a ForecastingItem with its opportunities, such as opportunities that share the same owner or forecast category and have a closing date within the period of the forecasting item. Available in API versions 26 and greater.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ForecastCategoryName`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A forecast category is the category within the sales cycle to which an opportunity is assigned based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize the forecast category names.
`ForecastedObjectId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the Split ID of the forecasted OpportunitySplit object if the forecast data source is opportunity splits or the OpportunityLineItem ID of the forecasted opportunity if the data source is product families. If the data source is product families and the opportunity has no line item, this field is Null. If the forecast data source is opportunities, this field is Null. This field is available in API version 29 and later. Read only.
`ForecastingItemId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ForecastingItem.

Field Name	Details
ForecastingTypeId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related ForecastingType.
OpportunityId	**Type** reference **Properties** Filter, Group, Sort **Description** The opportunity ID.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the opportunity owner.
PeriodId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the forecast.
Territory2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to get information about opportunities linked to forecasting items.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

s

SEE ALSO:

ForecastingAdjustment

ForecastingItem

ForecastingQuota

ForecastingItem

This is a read-only object used for individual forecast amounts. Users see amounts based on their perspectives and forecast roles. The amounts users see include one of the following when forecasting in revenue: `AmountWithoutAdjustments`, `AmountWithoutManagerAdjustment`, `ForecastAmount`, `OwnerOnlyAmount`. The amounts users see include one of the following when forecasting in quantity: `QuantityWithoutAdjustments`, `QuantityWithoutManagerAdjustment`, `ForecastQuantity`, `OwnerOnlyQuantity`. Available in API versions 26 and greater.

Additionally, note that users:

- with the "View All Forecasts" permission have access to all ForecastingItem fields.
- without the "View All Forecasts" permission have access to all fields for their own subordinates.

Other users can see the ForecastingItem object, but not its records.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AmountWithoutAdjustments`	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's owned revenue opportunities and the person's subordinates' opportunities, without adjustments. Subordinates include everyone reporting up to a person in the forecast hierarchy. This amount is visible only on reports.

Field Name	Details
AmountWithoutManagerAdjustment	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast number as seen by the forecast owner. This is the sum of the owner's revenue opportunities and the owner's subordinates' opportunities, including adjustments made by the forecast owner on the owner's or subordinates' forecasts. It doesn't include adjustments made by forecast managers above the owner in the forecast hierarchy.
AmountWithoutOwnerAdjustment	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast amount as seen by the forecast owner without the owner's adjustment. This is the sum of the subordinate's opportunities, including adjustments made by their manager or by the subordinate themselves, plus the rollup of the owner's own opportunities. *It doesn't include adjustments made by the forecast owner.*
ForecastAmount	**Type** double **Properties** Filter, Sort, Nillable **Description** The revenue forecast from the forecast manager's perspective and the sum of the owner's and subordinates' opportunities, including all forecast adjustments.
ForecastCategoryName	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A forecast category is the category within the sales cycle to which an opportunity is assigned based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize the forecast category names.
ForecastQuantity	**Type** double

Field Name	Details
	Properties Filter, Sort, Nillable **Description** The quantity forecast from the forecast manager’s perspective and the sum of the owner’s and subordinates’ opportunities, including all forecast adjustments. This field is available in API version 28 and later.
`ForecastingItemCategory`	**Type** picklist **Properties** Filter, Group, Sort **Description** This field indicates which type of forecast rollup the forecasting item belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable. ***Either cumulative or individual forecast category rollups:*** • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories.

Field Name	Details
`ForecastingTypeId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ForecastingType.
`HasAdjustment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag that indicates if the forecasting item includes a *manager* adjustment. This flag is true only when the item includes an adjustment and the user performing the query has read access to the adjustment.
`HasOwnerAdjustment`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag that indicates if the forecasting item includes an *owner* adjustment. This flag is true only when the item includes an adjustment and the user performing the query has read access to the adjustment. Available in API versions 33 and greater.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.

Field Name	Details
IsUpToDate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** A flag indicating whether or not a specific forecasting item reflects current information. For example, if users are making adjustments which are in process, the item won’t be up-to-date.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the forecast owner.
OwnerOnlyAmount	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person’s revenue opportunities, without adjustments.
OwnerOnlyQuantity	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person’s quantity opportunities, without adjustments. This field is available in API version 28 and later.
ParentForecastingItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the ForecastingItem that the current item rolls up to.
PeriodId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Period ID for the forecast.
`ProductFamily`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The product family of the forecast item. This field is available in API version 29 and later. Read only.
`Territory2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.
`QuantityWithoutAdjustments`	**Type** double **Properties** Filter, Sort, Nillable **Description** The sum of a person's owned quantity opportunities and also his or her subordinates' opportunities, without adjustments. Subordinates include everyone reporting up to a person in the forecast hierarchy. This field is available in API version 28 and later.
`QuantityWithoutManagerAdjustment`	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast number as seen by the forecast owner. This is the sum of the owner's quantity opportunities and subordinates' opportunities, including adjustments made on the subordinates' forecasts. It doesn't include adjustments made by forecast managers above the owner in the forecast hierarchy. This field is available in API version 28 and later.

Field Name	Details
`QuantityWithoutOwnerAdjustment`	**Type** double **Properties** Filter, Sort, Nillable **Description** The forecast quantity as seen by the forecast owner without the owner's adjustment. This is the sum of the subordinate's opportunities, including adjustments made by their manager or by the subordinate themselves, plus the rollup of the owner's own opportunities. *It doesn't include adjustments made by the forecast owner*. This field is available in API version 38.0 and later.

Usage

Use this object to obtain individual forecast amounts, either with or without adjustments, based on a user's perspective and forecast role. The ForecastingItem object is visible to all users, but only forecast managers and users above them in the forecast hierarchy can read or write ForecastingAdjustment records.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:

ForecastingAdjustment

ForecastingFact

ForecastingQuota

ForecastingOwnerAdjustment

This object represents an individual forecast user's adjustment of their *own* forecast via a ForecastingItem. Available in API versions 33 and greater. This object is separate from the ForecastingAdjustment object, which represents managers' adjustments of *subordinates'* forecasts.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency code of the adjustment. If omitted, the default is the importing user's personal currency.
`ForecastCategoryName`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category within the sales cycle that an opportunity is assigned to based on its opportunity stage. The standard forecast categories are Pipeline, Best Case, Commit, Omitted, and Closed. You can customize forecast category names. The forecast categories display information for that specific category; for example, Best Case only reflects amounts in the Best Case category.
`ForecastingItemCategory`	**Type** picklist **Properties** Create, Filter, Group, Sort **Description** This field indicates which type of forecast rollup the owner adjustment belongs to. Depending on whether your organization uses individual forecast category rollups or cumulative forecast rollups, you have these possible values for the `ForecastingItemCategory` field. ***Individual forecast category rollups:*** • PipelineOnly - Rollup from Pipeline opportunities only. • BestCaseOnly - Rollup from Best Case opportunities only. Adjustable. • CommitOnly - Rollup from Commit opportunities only. Adjustable. ***Cumulative forecast rollups:*** • OpenPipeline - Rollup from Pipeline + Best Case + Commit opportunities. • BestCaseForecast - Rollup from Best Case + Commit + Closed opportunities. Adjustable. • CommitForecast - Rollup from Commit + Closed opportunities. Adjustable.

Field Name	Details
	Either cumulative or individual forecast category rollups: • ClosedOnly - Rollup from Closed opportunities only. The `ForecastingItemCategory` field differs from the `ForecastCategoryName` field. • The `ForecastCategoryName` field represents the forecast category of the *underlying opportunities* rolling up to forecast amounts. In organizations using cumulative forecast rollups, the `ForecastCategoryName` field can be null because the cumulative forecast amounts include opportunities from multiple forecast categories. • The new `ForecastingItemCategory` field represents the *type of rollup* a forecast amount or adjustment is from. In organizations using individual forecast category columns, it contains the individual forecast rollup categories. In organizations using cumulative forecast rollups, it contains the cumulative rollup categories. When inserting owner adjustments, the values you insert for `ForecastCategoryName` and `ForecastingItemCategory` must be compatible with each other. In organizations using cumulative forecast rollups, the `ForecastCategoryName` is nillable. These are the valid pairs. **Individual forecast category rollups:** • `ForecastCategoryName`: BestCase, `ForecastingItemCategory`: BestCaseOnly • `ForecastCategoryName`: Commit, `ForecastingItemCategory`: CommitOnly **Cumulative forecast category rollups:** • `ForecastCategoryName`: null, `ForecastingItemCategory`: BestCaseForecast • `ForecastCategoryName`: null, `ForecastingItemCategory`: CommitForecast
`ForecastingItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the related ForecastingItem.
`ForecastingTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of the related ForecastingType.
`ForecastOwnerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the forecast owner.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true.
`OwnerAdjustedAmount`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The revenue amount of an individual forecast item, after an adjustment.
`OwnerAdjustedQuantity`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The quantity amount of an individual forecast item, after an adjustment.

Field Name	Details
OwnerAdjustmentNote	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A text note providing information about the adjustment. The maximum length is 140 characters. This field does not appear in reports.
PeriodId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the adjustment. Read only.
ProductFamily	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The Product Family for the adjustment. Read only.
StartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort **Description** The start of the adjustment, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.
Territory2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.

Usage

Use this object to obtain a user’s adjustment detail for a specified ForecastingItem in their own forecast.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

ForecastingQuota

This object represents an individual user's quota for a specified time period. The "Manage Quotas" user permission is required for creating, updating, or deleting quotas. (Users can only edit their subordinates' quotas, not their own.) The "View All Forecasts" permission is required to View any user's forecast, regardless of the forecast role hierarchy. Available in API versions 25 and greater. Forecast managers can view the forecasts of subordinates who report to them in the forecast hierarchy.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The currency code of the quota. If omitted, the default is the importing user's personal currency.
`ForecastingTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the related ForecastingType.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description True indicates that the adjustment is made in a revenue amount. If false, then `IsQuantity` must be true. This field is available in API version 28 and later.
`IsQuantity`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** True indicates that the adjustment is made in a quantity amount. If false, then `IsAmount` must be true. This field is available in API version 28 and later.
`PeriodId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Period ID for the quota. Read only.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The product family for the quota. This field is available in API version 29 and later.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the territory to forecast on. Available in API version 43 and later.
`QuotaAmount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The revenue quota amount for an individual user and for a specific period.

Field Name	Details
`QuotaOwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID that identifies the quota owner.
`QuotaQuantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity quota amount for an individual user and for a specific period. This field is available in API version 28 and later.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The start of the quota, expressed as month and year. The date can include any day in a given month. Stored using the first date of the month.

Usage

Use this object to get an individual user's quota for a specified time period.

Note: Beginning with API version 30.0, organizations can have more than one forecasting type enabled. The `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingItem`, and `ForecastingFact` objects can all have records with different `ForecastingTypeId` values. Use the ForecastingType object to determine the ID for each forecast type and then filter `ForecastingQuota`, `ForecastingAdjustment`, `ForecastingItem`, or `ForecastingFact` records as necessary.

SEE ALSO:

ForecastingAdjustment

ForecastingFact

ForecastingItem

ForecastingType

This object is used to identify the forecast type associated with `ForecastingAdjustment`, `ForecastingOwnerAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects. Available in API versions 30.0 and greater.

Note: This information only applies to Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CanDisplayQuotas`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether a forecast type can show quota information. Available in API version 38.0 and later.
`DateType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The date type that forecast amounts are based on. Values are: • `OpportunityCloseDate`: Base forecasts on opportunity close dates. • `ProductDate`: Base forecasts on opportunity product line item dates, if available. • `ScheduleDate`: Base forecasts on opportunity product schedule dates, if available. Available in API version 42.0 and later.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the forecasting type. Allowed values include:

Field Name	Details
	• `OpportunityRevenue` : Opportunities - Revenue • `OpportunityRevenueProductDate` : Opportunities - Revenue by product date. Available in API version 43.0 and later. • `OpportunityRevenueScheduleDate` : Opportunities - Revenue by schedule date. Available in API version 43.0 and later. • `OpportunityQuantity` : Opportunities - Quantity • `OpportunityQuantityProductDate` : Opportunities - Quantity by product date. Available in API version 43.0 and later. • `OpportunityQuantityScheduleDate` : Opportunities - Quantity by schedule date. Available in API version 43.0 and later. • `OpportunitySplitRevenue` : Opportunity Revenue Splits - Revenue • `OpportunityOverlayRevenue` : Opportunity Overlay Splits - Revenue • `OpportunityLineItemRevenue` : Product Families - Revenue • `OpportunityLineItemQuantity` : Product Families - Quantity • The name of a custom opportunity split type that has been enabled as a forecast type. Custom split types are based on currency fields, which can contain revenue amounts only. The `DeveloperName` is called `name` in the Metadata API and Forecasting Type in custom reports.
`HasProductFamily`	**Type** boolean **Properties** Defaulted on create, Group **Description** Indicates whether a forecasts view includes product families. Available in API version 40.0 and later.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is enabled.
`IsAmount`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is based on the revenue measurement.

Field Name	Details
IsQuantity	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecasting type is based on the quantity measurement.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the forecasting type.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** Master label for this Forecasting Type value. This display value is the internal label that does not get translated.
OpportunitySplitTypeId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the forecasting type has a split type, and if so, the name the split type. Available in API version 41.0 and later.
RoleType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Indicates whether the role type has a forecasting type, and if so, which forecasting type. Possible values are `R` (user role-based forecasting type), `T` (Territory1-based forecasting type; not used), and `Y` (Territory2-based forecasting type). Available in API version 41.0 and later.

Field Name	Details
`Territory2ModelId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the forecasting type has a Territory2 model, and if so, the name of the Territory2 model. Available in API version 41.0 and later.

Usage

Use this object to identify the forecast type of `ForecastingAdjustment`, `ForecastingQuota`, `ForecastingFact`, and `ForecastingItem` objects.

ForecastingUserPreference

Represents the forecasting selections that a user has made, such as display options, date range, forecasting type, and currency.

Note: This information applies to Collaborative Forecasts and not to Customizable Forecasts.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `update()`, `upsert()`

Fields

Field Name	Details
`ExternalId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A unique system-generated numerical identifier for the user.
`ForecastingDisplayedTypeId`	**Type** reference **Properties** Create, Group, Sort, Update **Description** An identifier for the forecasting type that's displayed.

Field Name	Details
ForecastingPeriodDuration	**Type** int **Properties** Create, Group, Nillable, Sort, Update **Description** How long the forecasting period lasts.
ForecastingPeriodType	**Type** picklist **Properties** Create, Group, Nillable, Restricted picklist, Sort, Update **Description** The forecasting period's type. Valid values include: Month, Quarter, Week, or Year
ForecastingStartPeriod	**Type** int **Properties** Create, Group, Nillable, Sort, Update **Description** The date when the forecasting period begins.
ForecastingViewCurrency	**Type** string **Properties** Create, Group, Nillable, Sort, Update **Description** The currency shown on the forecasts page.
IsForecastingHideZeroRows	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows zero-value rows.
IsForecastingShowQuantity	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update

Field Name	Details
	Description Whether the forecasts page shows forecast quantity.
`IsHideForecastingGuidedTour`	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows the guided tour.
`IsHideForecastingQuotaColumn`	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows a quota column.
`IsShowForecastingQuotaAttainment`	**Type** boolean **Properties** Create, Defaulted on create, Group, Sort, Update **Description** Whether the forecasts page shows quota attainment information (Salesforce Classic only).

ForecastShare

Represents the sharing of a customizable forecast at a given role and territory.

Note: This information applies to Customizable Forecasting and not Collaborative Forecasts.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can’t access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
AccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** A value (`Read`, `Edit`, or `All`) that represents the type of sharing being allowed.
CanSubmit	**Type** boolean **Properties** Filter, Group, Sort **Description** Indicates whether the user or group can submit forecasts (`True`) or not (`False`).
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Manual`—The User or Group has access because a User has manually shared the forecast with them. • `Owner`—The User is the owner of the forecast.
UserOrGroupId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID representing the User or Group being granted access.
UserRoleId	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the UserRole associated with this object.

Usage

This object allows you to determine which users and groups can view or submit forecasts owned by other users.

Goal

The Goal object represents the components of a goal such as its name, description, and status.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CompletionDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the goal.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the goal. The maximum length is 65,535 characters.
`DueDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the goal is due.

Field Name	Details
ImageUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL for the goal image. The image must be stored in Documents and set as externally available. Applicable only to Goal objects of `Type`: Goal.
IsKeyCompanyGoal	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the goal is a key company goal.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed a record that is related to this goal.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed this goal. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the goal. The maximum length is 255 characters.
OwnerId	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the goal.
`Progress`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The progress of the goal measured as a percentage.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the goal.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the goal. Possible values: • Draft • Published • Completed • Canceled • Not Completed

GoalFeed

Represents a single feed item in the feed displayed for a Goal record. The goal feed shows changes to a goal for fields that are tracked in feeds, posts, and comments about the goal.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is TextPost. Optional when `Type` is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The numbers of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets `Type` to ContentPost.
`ContentSize`	**Type** int **Properties** Available in API version 36.0 and earlier only. Group, Nillable, Sort **Description** Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** string **Properties** Available in API version 36.0 and earlier only. Group, Nillable, Sort **Description** Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then `InsertedById` is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines.

Field Name	Details
	• `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the goal record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file.

Field Name	Details
	• `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.

GoalHistory

This read-only object contains historical information about changes that have been made to the Goal object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`GoalId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the goal.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

GoalLink

Represents the relationship between two goals. This is a many-to-many relationship, meaning that each goal can link to many other goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The auto-generated name of the goal link.
`ParentGoalId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the parent goal.
`SubgoalId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the subgoal.

GoalShare

Represents a sharing entry on a Goal object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user’s or group’s level of access to the goal. The possible values are: • Read Only • Read/Write • Owner This field must be set to an access level that is higher than the organization’s default access level for goals.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the goal that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the Goal or is in a user role above the Goal owner in the role hierarchy. • Manual: User or group has access because a user with “All” access manually shared the Goal with the user or group. • Rule: User or group has access via a Goal sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description ID of the user or group that was given access to the Goal. This field can't be updated.

GoogleDoc

Represents a link to a Google Document. This object is available in API version 14.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available in **All** Editions except **Database.com** for Google Apps Premier Edition accounts. See the Salesforce online help for more information.

Fields

Field	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the Google document.
`Owner`	**Type** reference **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The ID of the user who currently owns this Google Document. Default value is the user logged in to the API to perform the create.
`ParentId`	**Type** reference **Properties** Create, Filter

Field	Details
	Description Required. ID of the attachment's parent object. The following objects are supported as parents of Google documents: Account, Asset, Campaign, Case, Contact, Contract, Custom Objects, Lead, Opportunity, Product2, and Solution.
`Url`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The URL of the Google document.

Group

A set of User records.

Groups are sets of users. They can contain individual users, other groups, the users in a particular role or territory, or the users in a particular role or territory plus all the users below that role or territory in the hierarchy.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `search()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`DefaultDivision`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** This record's default division. Only applicable if divisions are enabled for your organization.
`DeveloperName`	**Type** string

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Group Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`DoesIncludeBosses`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the managers have access (`true`) or do not have access (`false`) to records shared with members of the group. This field is only available for public groups. This field is available in API version 18.0 and later.
`DoesSendEmailToMembers`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the email is sent (`true`) or not sent (`false`) to the group members. The email is sent to queue members as well.
`Email`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Email address for a group of type Case. Applies only for a case queue.
`Name`	**Type** string

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. Name of the group. Corresponds to **Label** on the user interface.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who owns the group.
`QueueRoutingConfig`	**Type** reference **Properties** Create, Delete, Query, Retrieve, Update **Description** The ID of the queue routing configuration associated with the queue.
`RelatedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the associated groups. For groups of type “Role,” the ID of the associated UserRole. The `RelatedId` field is polymorphic.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. Type of the group. One of the following values: • `Regular`—Standard public group. When you `create()` a group, its type must be `Regular`, unless a partner portal is enabled for the organization, in which case the type can be `Regular` or `PRMOrganization`. • `Role`—Public group that includes all the User records in a particular UserRole. • `RoleAndSubordinates`—Public group that includes all the User records in a particular UserRole and all the User records in any subordinate UserRole. • `Organization`—Public group that includes all the User records in the organization. This group is read-only.

Field	Details
	• `Case`—Public group of users, members of a queue that can own a Case. • `Lead`—Public group of users, members of a queue that can own a Lead. • `Manager`—Public group that includes a user's direct and indirect managers. This group is read-only. • `ManagerAndSubordinatesInternal`—Public group that includes a user and the user's direct and indirect reports. This group is read-only. • `PRMOrganization`—Public group that includes all the partners in an organization that has the partner portal feature enabled. • `Queue`—Public group that includes all the User records that are members of a queue. • `Territory`—Public group that includes all the User records in an organization that has the territory feature enabled. • `TerritoryAndSubordinates`—Public group that includes all the User records in a particular UserRole and all the User records in any subordinateUserRole in an organization that has the territory feature enabled. • `ChannelProgramGroup`—Public group for partners in a channel program. • `CollaborationGroup`—Chatter group. Only `Regular`, `Case`, and `Lead` can be used when creating a group. The other values are reserved.

Usage

Unlike users, this object can be deleted. Any User can access this object—no special permissions are needed.

Only public groups are accessible via the API. Personal groups are not available.

In API version 34.0 and later, you can query a group using `Related.Name` to retrieve the group's name. `Related.Name` is supported for public groups, user roles, territories, manager groups, and user names.

In API version 13.0 and later, if you delete a public group, it is deleted even if it has been used in sharing, consistent with the behavior for UserRole. In versions before 13.0, such sharing prevents the record from being deleted.

SEE ALSO:

GroupMember

Object Basics

GroupMember

Represents a User or Group that is a member of a public group.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users cannot access this object.

Fields

Field	Details
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Group.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the User or Group that is a direct member of the group.

Usage

A record exists for every User or Group who is a direct member of a public group whose `Type` field is set to Regular. User records that are indirect members of Regular public groups are not listed as group members. A User can be an indirect member of a group if he or she is in a UserRole above the direct group member in the hierarchy, or if he or she is a member of a group that is included as a subgroup in that group.

If you attempt to create a record that matches an existing record, system simply returns the existing record.

SEE ALSO:

Object Basics

HashtagDefinition

HashtagDefinition represents hashtag (#) topics in public Chatter posts and comments. Public posts and comments include those on profiles and in public groups, but not those on records or in private groups. This object is available in API version 26.0 and later.

Important: Starting in Spring '16, API access to HashtagDefinition is disabled across all API versions. Any integrations relying on API queries to this object stop working. You can continue to use hashtags in posts and comments, and the hashtags continue to create corresponding topics. We recommend that you redirect all API queries and reports using the HashtagDefinition object to use the Topic object instead. For more information, see Retiring the Legacy HashtagDefinition Object—FAQs.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`HashtagCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of times a hashtag topic is used.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The string of characters following the hashtag (#) in a hashtag topic.
`NameNorm`	**Type** string **Properties** Filter, Nillable, Sort **Description** The string of characters following the hashtag (#) in a hashtag topic, normalized to remove capitalization and punctuation.
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Identifier of the community to which the HashtagDefinition belongs. This field is available only if Salesforce Communities is enabled in your organization.

Usage

Use this object to identify public hashtag topics and see how often they're used.

SEE ALSO:

Topic

Holiday

Represents a period of time during which your customer support team is unavailable. Business hours and escalation rules associated with business hours are suspended during any holidays with which they are affiliated.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

All users, even those without the "View Setup and Configuration" user permission, can view holidays via the API.

Fields

Field	Details
`ActivityDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the Holiday `IsAllDay` flag is set to `true` (indicating that it is an all-day holiday), then the holiday due date information is contained in the `ActivityDate` field. This field is a date field with a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant, and you should not attempt to alter it to account for any time zone differences.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the holiday.

Field	Details
EndTimeInMinutes	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The end time of the holiday in minutes.
IsAllDay	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the duration of the holiday is all day (`true`) or not (`false`).
IsRecurrence	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the holiday is scheduled to repeat itself (`true`) or only occurs once (`false`). This is a read only field on update, but not on create. If this field value is `true`, then any recurrence fields associated with the given recurrence type must be populated.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the holiday.
RecurrenceDayOfMonth	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day of the month on which the holiday repeats.
RecurrenceDayOfWeekMask	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The day or days of the week on which the holiday repeats. This field contains a bitmask. For each day of the week, the values are as follows: • Sunday = `1` • Monday = `2` • Tuesday = `4` • Wednesday = `8` • Thursday = `16` • Friday = `32` • Saturday = `64` Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.
`RecurrenceEndDateOnly`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last date on which the holiday repeats. For multiday recurring events, this is the day on which the last occurrence starts.
`RecurrenceInstance`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The frequency of the recurring holiday. For example, `2nd` or `3rd`.
`RecurrenceInterval`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The interval between recurring holidays.
`RecurrenceMonthOfYear`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The month of the year on which the event repeats.

Field	Details
RecurrenceStartDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the recurring holiday begins. Must be a date and time before `RecurrenceEndDateOnly`.
RecurrenceType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the holiday repeats. For example, daily, weekly, or every Nth month (where "Nth" is defined in `RecurrenceInstance`).
StartTimeInMinutes	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start time of the holiday in minutes.

Usage

Use this object to view and update holidays, which specify dates and times at which associated business hours and escalation rules are suspended.

IconDefinition

Represents the icon-related metadata for a custom tab. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
ContentType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's content type, for example, "image/png."
DurableId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique virtual Salesforce ID for the icon.
Height	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's height in pixels. If the icon content type is an SVG type, height and width values are not used.
TabDefinitionId	**Type** string **Properties** Filter, Nillable, Sort **Description** The `TabDefinition` ID.
Theme	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The icon's theme.
Url	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The fully qualified URL for this icon.
`Width`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The tab icon's width in pixels. If the icon content type is an SVG type, height and width values are not used.

Idea

Represents an idea on which users are allowed to comment and vote, for example, a suggestion for an enhancement to an existing product or process. This object is available in API version 12 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Note: For other standard objects, the `describeLayout()` call returns the `recordTypeMappings` section that contains the layout ID and picklist values for each record type. However, the `recordTypeMappings` section and the fields it includes are not available for the Idea object.

When performing a SOSL search on Idea objects, IdeaComment objects are also searched.

Fields

Field	Details
`AttachmentBody`	**Type** base64 **Properties** Create, Nillable, Update **Description** File data for the attachment. This field is available in API version 28.0 and later.

Field	Details
AttachmentContentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Type of the attachment. This field is available in API version 28.0 and later.
AttachmentLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the attachment in bytes. This field is available in API version 28.0 and later.
AttachmentName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the attachment. This field is available in API version 28.0 and later.
Body	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the Idea.
Categories	**Type** multipicklist **Properties** Create, Filter, Nillable, Update **Description** Customizable multi-select picklist used to organize Ideas into logical groupings. Note: This field is only available if your organization has the `Categories` field enabled. This field is enabled by default in organizations created after API version 14 was released. If the `Categories` field is enabled, API versions 13 and earlier do not have access to either the `Categories` or `Category` fields.
Category	**Type** picklist

Field	Details
	Properties Create, Filter, Nillable, Update **Description** Customizable picklist of values used to organize Ideas into logical groupings. Note: This field is not available if your organization has the multi-select `Categories` field enabled.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The zone ID associated with the idea. Once you create an idea, you can't change the zone ID associated with that idea. Note: API version 12 does not support zone ID. If you create an idea in version 12, your idea is automatically posted to the oldest zone that you have permission to access.
`CreatorFullPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo. This field is available in API version 28.0 and later.
`CreatorName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the idea or commented on the idea. This field is available in API version 28.0 and later.
`CreatorSmallPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo. This field is available in API version 28.0 and later.

Field	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
IdeaThemeID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Identifies the idea theme associated with the idea.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
IsHtml	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. If this value is `true`, your organization has the Ideas HTML editor enabled, and the Idea `Body` may contain HTML. If this value is `false`, the HTML editor is disabled and the Idea `Body` only contains regular text.
IsMerged	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read only. Indicates whether the idea has been merged with a parent idea (`true`) or not (`false`). You can't vote for or add comments to a merged idea. Note: In API version 27, `IsMerged` replaces `IsLocked`. Existing formula fields that use `IsLocked` must be edited to use `IsMerged`.

Field	Details
LastCommentDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the last comment (child IdeaComment object) was added.
LastCommentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read only. The ID of the last comment (child IdeaComment object).
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
NumComments	**Type** int **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** The number of comments (child IdeaComment objects) that users have submitted for the given idea.
ParentIdeaId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID associated with this idea's parent idea. When multiple ideas are merged together, one idea becomes the parent (master) of the other ideas. The `ParentIdeaId` is automatically set when you merge ideas.
`RecordTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the record type assigned to this object.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values used to specify the status of an idea.
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The descriptive title of the idea.
`VoteScore`	**Type** double **Properties** Filter, Nillable, Sort **Description** The internal score of the Idea, used to sort Ideas on the Popular tab in the application user interface. The internal algorithm that determines the score gives older votes less weight than newer votes, simulating exponential decay. The score itself does not display in the application user interface. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.
`VoteTotal`	**Type** double **Properties** Filter, Nillable, Sort

Field	Details
	Description An Idea's total number of points. Each vote a user makes is worth ten points, therefore the value of this field is ten times the number of votes an idea has received. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.

Note: If you are importing Idea data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use this object to track ideas, which are written suggestions on which users can vote and comment.

SEE ALSO:

IdeaComment

Vote

IdeaComment

Represents a comment that a user has submitted in response to an idea.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Note: When performing a SOSL search on IdeaComment objects, Idea objects are also searched.

Fields

Field	Field Type
`CommentBody`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Body of the submitted comment.

Field	Field Type
CommunityId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The zone ID associated with the idea. Once you create an idea, you can't change the zone ID associated with that idea. Note: API version 12 does not support zone ID. If you create an idea in version 12, your idea is automatically posted to the oldest zone that you have permission to access.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo. This field is available in API version 28.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the idea or commented on the idea. This field is available in API version 28.0 and later.
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo. This field is available in API version 28.0 and later.
IdeaId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the idea on which this comment was made.

Field	Field Type
IsHtml	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. If this value is `true`, your organization has the Ideas HTML editor enabled, and the `CommentBody` field may contain HTML. If this value is `false`, the HTML editor is disabled and the `CommentBody` field only contains regular text.
UpVotes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total number of up votes for the question.

Note: If you import these records, and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself.

Usage

Use this object to track comments on ideas, which are users' text responses to ideas.

SEE ALSO:

Idea
Vote

IdeaReputation

Represents a collection of statistics and scores derived from a user's activity within an Ideas zone or internal organization. This object is available in API version 28.0 and later.

Supported Calls

`query()`, `retrieve()`,

Fields

Field	Details
CommentCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of comments a user has created in a zone or the internal organization. This number excludes comments the user creates on his or her own idea.
CommentsReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of comments a user has received in a zone or the internal organization.
ContextId	**Type** reference **Properties** Filter, Group, Namepointing, Nillable, Sort **Description** The ID of the zone or internal organization.
DownVotesGivenCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes a user has given in a zone or the internal organization.
DownVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of down votes a user has received in a zone or the internal organization.
IdeaCount	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The number of ideas a user has created in a zone or the internal organization.
ReputationLevel	**Type** string **Properties** Nillable **Description** The reputation level that a user has achieved based on their score in a zone or within an organization.
Score	**Type** double **Properties** Filter, Nillable, Sort **Description** The total score of a user's activity within a zone or within an organization.
UpVotesGivenCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes a user has given in a zone or the internal organization. This number doesn't include the default vote the system applies when the user creates the idea.
UpVotesReceivedCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of up votes a user has received in a zone or the internal organization.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** The user ID associated with the reputation.

Usage

Use to query a user's reputation within a zone.

IdeaReputationLevel

Represents a reputation level within an Ideas zone or internal organization and is used by the system to calculate reputation. You can create up to 25 levels per zone or internal organization. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ContextId`	**Type** reference **Properties** Create, Filter, Group, Namepointing, Sort, Update **Description** The ID of the zone or internal organization.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the reputation level. The name must be unique within the zone or internal organization. Maximum size is 50 characters.
`Threshold`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Minimum number of points for this level. The threshold must be unique within the zone or internal organization and must be greater than or equal to zero.

Usage

Use to create or edit reputation levels for an Ideas zone or internal organization.

IdeaTheme

Represents an invitation to community members to submit ideas that are focused on a specific topic. This object is available in API version 26 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`,

Fields

Field Name	Details
`Categories`	**Type** multipicklist **Properties** Create, Filter, Nillable, Update **Description** Customizable multi-select picklist used to organize ideas and idea themes into logical groupings.
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, **Description** The zone ID associated with the idea theme.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Description`	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description Description of the idea theme.
EndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date marking the end of the idea theme.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
StartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date that the idea theme begins.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Customizable picklist of values used to specify the status of the idea theme.
Title	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Title of the idea theme.

Usage

Use the object to track ideas that are submitted to an idea theme.

Individual

Represents a customer's data privacy and protection preferences. Data privacy records based on the Individual object store your customers' preferences. Data privacy records are associated with related leads and contacts. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.
- The Individual object isn't available for Customer Community, Partner Community, and Customer Portal users.

Fields

Field Name	Details
`Birthdate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer's birthdate.
`CanStorePiiElsewhere`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indication that you can store the customer's personally identifiable information (PII) outside of their legislation area. For example, you could store an EU citizen's PII data in the US.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The customer's first name. Maximum size is 40 characters.

Field Name	Details
`HasOptedOutGeoTracking`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not track geolocation on mobile devices.
`HasOptedOutProcessing`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not process personal data, which can include collecting, storing, and sharing personal data.
`HasOptedOutProfiling`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not process data for predicting personal attributes, such as interests, behavior, and location.
`HasOptedOutSolicit`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not solicit products and services.
`HasOptedOutTracking`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to not track web activity.
`IndividualsAge`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Indicates whether the customer is considered to be a minor.
LastName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The customer's last name. Maximum size is 80 characters.
Name	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`. Maximum size is 121 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the account associated with this customer.
Salutation	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The title for addressing the customer, such as Dr. or Mrs.
SendIndividualData	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to export personal data for delivery to the customer.
ShouldForget	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Preference to delete records and personal data related to this customer.

IndividualHistory

Represents the history of changes to values in the fields of a data privacy record, based on the Individual object. This object is available in versions 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.
- The Individual object isn't available to Customer Community, Partner Community, and Customer Portal users.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the changed field.
`IndividualId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the data privacy record. Label is **Individual ID**.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The updated value of the changed field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The previous value of the changed field.

Usage

Use this object to identify changes to data privacy records.

This object respects field-level security on the parent object.

IndividualShare

Represents a list of access levels to a data privacy record along with an explanation of the access level. For example, if you have access to a record because you own it, the `IndividualAccessLevel` is `All` and `RowCause` is Owner. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available if Data Protection and Privacy is enabled.
- The Individual object isn't available to Customer Community, Partner Community, and Customer Portal users.

Fields

Field Name	Details
`IndividualAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Level of access that the user or group has to the data privacy record. The possible values include: • `Read` • `Edit` • `All` (Except for create or update.) Set this field to an access level that's higher than your default access level for individuals.
`IndividualId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Individual associated with this sharing entry. This field isn't available for updates.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Write to this field when its value is omitted or set to `Manual` (default). We give you some of the many possible values, including: • `Manual`—The user or group has access because a user with "All" access manually shared the data privacy record with them. • `Owner`—The user is the owner of the data privacy record. • `Rule`—The user or group has access to the data privacy record via an Individual sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the data privacy record. This field isn't available for updates.

Usage

This object lets you determine which users and groups can view or edit Individual records owned by other users.

KnowledgeableUser

Represents a user identified as knowledgeable about a specific topic, and ranks them relative to other knowledgeable users. This object is available in API version 31.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the community the topic exists in. This field is available only if Salesforce Communities is enabled for your organization.
`RawRank`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Rank of this user's knowledge on the topic relative to other users.
`TopicId`	**Type** reference **Properties** Filter, Group, Sort **Description** Unique ID for the topic in Salesforce.
`UserId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description Unique ID for the user in Salesforce.

KnowledgeArticle

Provides read-only access to an article and the ability to delete the master article. This object is available in API version 19.0 and later.

Unlike KnowledgeArticleVersion, the ID of a KnowledgeArticle record is identical irrespective of the article's version (status). For more information on articles and article types, see "Work with Articles and Translations" and "Knowledge Article Types" in the Salesforce online help.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

A user must have the "View Articles" permission enabled. Salesforce Knowledge users, unlike Customer Portal and partner portal users, must also be granted the `Knowledge User` feature license.

Fields

Field Name	Details
`ArchivedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who archived the article.
`ArchivedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was archived.
`ArticleNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field Name	Details
	Description The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
`CaseAssociationCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of cases attached to the article.
`FirstPublishedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was first published.
`LastPublishedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the article was last published.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
`MasterLanguage`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The article's original language. Only accessible if your knowledge base supports multiple languages.

Usage

Use this object to query or retrieve articles. KnowledgeArticle can be used in a SOQL clause, but doesn't provide access to the fields from the article. Provides read-only access to an article and the ability to delete the master article.

Usage for SOQL with KnowledgeArticle

- To expose the *migrated_to_from_id* on **KnowledgeArticle** and **KnowledgeArticleVersion** to the sObject API: expose **MigratedToFromArticle** in **KnowledgeArticle**. The org must have pref **LightningKnowledgeEnabled**. For SOQL:
  1. To filter by **MigratedToFromArticle**, remove any other filters.
  2. When filtering by **MigratedToFromArticle**, use the '=' or 'IN' operator.
  3. When filtering by **MigratedToFromArticle**, the value can't be null or empty.

SEE ALSO:

Articles

Data Categories

KnowledgeArticleVersion

KnowledgeArticleVersion

Provides a global view of standard article fields across all article types depending on their version. This object is available in API version 18.0 and later.

Use this object to:

- Query or search generically across multiple article types.
- Filter on a specific version.
- Update standard fields, those fields that are updateable, in draft versions.

When you query on the archived article, the results include both the article and the article's archived versions.

Note: You can't update draft translations with the API.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, and `update()`.

Note:

- You can only update draft versions.
- To create, update, or delete a Knowledge article version, use the call on *ArticleType*_kav, where *ArticleType* is the name of the article's type. For example, to delete, use *ArticleType*_kav.delete().

Special Access Rules

A user must have the "View Articles" permission enabled. Salesforce Knowledge users, unlike Customer Portal and partner portal users, must also be granted the `Knowledge User` feature license to view and edit article versions.

Fields

Field Name	Details
`ArchivedById`	**Type** reference **Properties** Filter, Nillable **Description** The ID of the user who archived the article.
`ArchivedDate`	**Type** dateTime **Properties** Filter, Nillable **Description** The date when the article was archived.
`ArticleNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter **Description** The unique number automatically assigned to the article when it's created. You can't change the format or value for this field.
`ArticleType`	**Type** string

Field Name	Details
	Properties Defaulted on create,Filter **Description** Indicates the API Name of the article type. The `ArticleType` is assigned to the article when it's created. You can't change the value of this field. This field is available in API version 26.0 and later.
`FirstPublishedDate`	**Type** dateTime **Properties** Filter, Nillable **Description** The date when the article was first published.
`IsLatestVersion`	**Type** boolean **Properties** Defaulted on create, Group, Filter, Sort **Description** Indicates whether the article is the most current version. (`true`) or not (`false`). This field can be `true` on the online or published version, a draft version in the master language, a draft version in a translation, and the latest archived version. However, you can't filter by (PublishState='Online') and (IsLatestVersion=false) because the online version is also the latest version. This field is available in API version 24.0 and later.
`IsMasterLanguage`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the article has one or more translations associated with it (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the source article has been updated since this translated version was created (`true`) or not (`false`). Only accessible if your knowledge base supports multiple languages.

Field Name	Details
`IsVisibleInApp`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Required. Indicates whether the article is visible in the Articles tab (`true`) or not (`false`).
`IsVisibleInCsp`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Required. Indicates whether the article is visible in the Customer Portal (`true`) or not (`false`).
`IsVisibleInPkb`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Required. Indicates whether the article is visible in the public knowledge base (`true`) or not (`false`).
`IsVisibleInPrm`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Required. Indicates whether the article is visible in the partner portal (`true`) or not (`false`).
`KnowledgeArticleId`	**Type** reference **Properties** Filter **Description** The ID of the article independent from its version. The value for this field is retrieved from the `Id` field of the KnowledgeArticle object.
`Language`	**Type** picklist

Field Name	Details
	Properties Filter, Restricted picklist **Description** The language that the article is written in, such as `French` or `Chinese (Traditional)`. Querying or searching articles in SOQL or SOSL requires that you specify the `Language` field in the WHERE clause. The language must be the same for all article types.
`LastPublishedDate`	**Type** dateTime **Properties** Filter, Nillable **Description** The date when the article was last published.
`MasterVersionId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the source article, if the article is the translation of a source article. Only accessible if your knowledge base supports multiple languages.
`OwnerId`	**Type** reference **Properties** Filter **Description** The ID of the article's owner.
`PublishStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** The publication status for the article: • `Draft`: any draft articles. • `Online`: articles published in Salesforce Knowledge. • `Archived`: archived articles. A user must have the “Manage Articles” permission enabled to use `Online`.

Field Name	Details
	Querying or searching articles in SOQL or SOSL requires that you specify either the `PublishStatus` or the `Id` field in the WHERE clause. You can search for only one publication status per article type in a single SOSL query. When searching for articles with a `PublishStatus` of `Archived`, also check that `IsLatestVersion` equals `false` in your WHERE clause.
`SourceId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the source from which the article was created (Case or Reply).
`Summary`	**Type** textarea **Properties** Filter, Nillable **Description** Summary of the article. Maximum size is 1000 characters.
`Title`	**Type** string **Properties** Defaulted on create, Filter, idLookup **Description** Required. Article's title. Maximum size is 255 characters.
`TranslationCompletedDate`	**Type** dateTime **Properties** Filter, Nillable **Description** Date and time when the article was last translated. Only accessible if your knowledge base supports multiple languages.
`TranslationExportedDate`	**Type** dateTime **Properties** Filter, Nillable **Description** Date and time when the article was last exported for translation. Only accessible if your knowledge base supports multiple languages.

Field Name	Details
TranslationImportedDate	**Type** dateTime **Properties** Filter, Nillable **Description** Date and time when the article was last imported for translation. Only accessible if your knowledge base supports multiple languages.
UrlName	**Type** string **Properties** Filter **Description** Required. Represents the article's URL. Can contain alphanumeric characters and hyphens but can't begin or end with a hyphen. `UrlName` is case-sensitive and its maximum size is 255 characters.
ValidationStatus	**Type** picklist **Properties** Filter, Group **Description** Shows whether the content of the article has been validated. Default values are `Validated` and `Not Validated`. This field is available in API version 24.0 or later.
VersionNumber	**Type** int **Properties** None **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.

Usage

Use this object to query, retrieve, or search for articles across all article types depending on their version. You can update draft master articles. Additionally, you can delete articles that are not drafts. Client applications can use KnowledgeArticleVersion with `describeDataCategoryGroups()` and `describeDataCategoryGroupStructures()` to return the category groups and the category structure associated with Salesforce Knowledge.

Alternatively, client applications can use the article type `API Name` followed by `__kav` to query, retrieve, or search for articles for a specific article type.

To access an article independent of its version, use the KnowledgeArticle object.

SOQL Samples

The following SOQL clause uses KnowledgeArticleVersion to query all published articles from **all article types** complying with the classification specified in the WITH DATA CATEGORY clause:

```
SELECT Title, Summary
FROM KnowledgeArticleVersion
WHERE PublishStatus='Online'
AND Language = 'en_US'
WITH DATA CATEGORY Geography__c ABOVE_OR_BELOW europe__c AND Product__c BELOW All__c
```

The following SOQL clause uses the article type `API Name` to limit the query to all draft articles from the `Offer__kav` article type:

```
SELECT Id, Title
FROM Offer__kav
WHERE PublishStatus='Draft'
AND Language = 'en_US'
WITH DATA CATEGORY Geography__c AT (france__c,usa__c) AND Product__c ABOVE dsl__c
```

The following SOQL clause uses KnowledgeArticleVersion to query the Ids of all archived versions of a particular article:

```
SELECT Id
FROM KnowledgeArticleVersion
WHERE PublishStatus='Archived'
AND IsLatestVersion=false
AND KnowledgeArticleId='kA1D00000001PQ6KAM'
```

SOQL and SOSL with KnowledgeArticleVersion

- Always filter on a single value of `PublishStatus` unless the query filters on one or more primary key IDs. To support security, only users with the "Manage Articles" permission see articles whose `PublishStatus` value is `Draft`.
- Archived article versions are stored in the articletype_kav object. To query archived article versions, specify the article `Id` and set `IsLatestVersion='0'`.
- Always filter on a single value of `Language`. However, in SOQL, you can filter on more than one `Language` if there is a filter on `Id` or `KnowledgeArticleId`.

Additional Usage for SOQL and SOSL with KnowledgeArticleVersion

- To expose the *migrated_to_from_id* on **KnowledgeArticle** and **KnowledgeArticleVersion** to the sObject API: expose **MigratedToFromArticleVersion** in **KnowledgeArticleVersion**. The org must have pref **LightningKnowledgeEnabled**. For SOQL:
  1. To filter by **MigratedToFromArticleVersion**, remove any other filters.
  2. When filtering by **MigratedToFromArticleVersion**, use the '=' or 'IN' operator.
  3. When filtering by **MigratedToFromArticleVersion**, the value can't be null or empty.
- For SOSL

- 1. **MigratedToFromArticleVersion** isn't supported in SOSL.

SEE ALSO:

Articles

Data Categories

KnowledgeArticle

KnowledgeArticleViewStat

KnowledgeArticleVoteStat

KnowledgeArticleVersionHistory

Enables read-only access to the full history of an article. This object is available in API version 25.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

This object respects field, entity, and record-level security. You must have at least "Read" permission on the article type or the field to access its history. For data category security, Salesforce determines access based on the categorization of the online version of an article. If there is no online version, then security is applied based on the archived version, followed by the security of the draft version.

Fields

Field Name	Details
`EventType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of event that is tracked in the history table.
`FieldName`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Name of the tracked field.

Field Name	Details
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language that the article is written in, such as French or Chinese (Traditional). Querying or searching articles in SOQL or SOSL requires that you specify the Language field in the WHERE clause. The language must be the same for all article types.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The most recent value of the field before it was changed.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the article.
ParentSobjectType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of object that contains the field.
VersionId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID assigned to a version of the article.
`VersionNumber`	**Type** int **Properties** Filter, Group, Sort **Description** The number assigned to a version of an article. This field is available in API version 24.0 and later.

Usage

Use this object to query events in the history of an article. For example, you can retrieve the number of edits a particular user has made to an article, how many times the article has been published, and so on.

KnowledgeArticleViewStat

Provides statistics on the number of views for the specified article across all article types. This object is read-only and available in API version 20 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Users must have access to the published version of an article to retrieve its views. For more information on published article version, see the `PublishStatus` field in KnowledgeArticleVersion.

Fields

Field Name	Details
`Channel`	**Type** picklist **Properties** Filter, Restricted picklist

Field Name	Details
	Description The channel where the article is viewed: • `AllChannels` for article views across all channels. • `App` for the internal Salesforce Knowledge application. • `Pkb` for article views in public knowledge base. • `Csp` for Customer Portal. • `Prm` for article view in partner portal.
`NormalizedScore`	**Type** double **Properties** Filter, Nillable **Description** Article's weighted views in the selected channel. The article with most views has a score of 100. Other article views are then calculated relative to this highest view score. For example, if the best read article has 2000 views and another has 1000. The first one gets a score of 100 while the second gets 50.
`ParentId`	**Type** reference **Properties** Filter **Description** ID of the viewed article. This corresponds to a KnowledgeArticle record.
`ViewCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of unique views an article has received in the selected channel. An article with a high number of views may not always have a high normalized score. The normalized score for an article is calculated based on views over time, with more recent views earning a higher score. This field is available in API version 27.0 and later.

Usage

Use this object to query or retrieve statistics for article views.

Alternatively, client applications can use the article type `API Name` followed by `__ViewStat` to query or retrieve most viewed articles from a specific article type.

SOQL Samples

The following SOQL clause uses KnowledgeArticleViewStat to query all the article views in Salesforce Knowledge and return the related articles:

```
SELECT Id, NormalizedScore, Parent.Id
        FROM KnowledgeArticleViewStat where Channel = 'App'
        ORDER BY NormalizedScore
```

Use the following clause to restrict your query to Offer articles for the `Offer` article type:

```
SELECT Id, NormalizedScore, Parent.Id
        FROM Offer__ViewStat where Channel = 'App'
        ORDER BY NormalizedScore
```

SEE ALSO:

- Articles
- Data Categories
- KnowledgeArticle
- KnowledgeArticleVersion
- KnowledgeArticleVoteStat

KnowledgeArticleVoteStat

Provides the weighted rating for the specified article on a scale of 1 to 5 across all article types. This object is read-only and available in API version 20 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Users must have access to the published version of an article to retrieve its votes. For more information on published article version, see the `PublishStatus` field in KnowledgeArticleVersion

Fields

Field Name	Details
`Channel`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The channel where the article is rated:

Field Name	Details
	• `AllChannels` for article views across all channels. • `App` for the internal Salesforce Knowledge application. • `Pkb` for article views in public knowledge base. • `Csp` for Customer Portal. • `Prm` for article view in partner portal.
`NormalizedScore`	**Type** double **Properties** Filter, Nillable **Description** Article's weighted score on a scale of 1 to 5. A higher score means more votes. Articles without recent votes trend towards an average rating of three stars.
`ParentId`	**Type** reference **Properties** Filter **Description** The rated article. This corresponds to a KnowledgeArticle record.

Usage

Use this object to query or retrieve the rating for an article.

Alternatively, client applications can use the article type `API Name` followed by `__VoteStat` to query or retrieve the rating for an article for a specific article type.

SOQL Samples

See KnowledgeArticleViewStat.

SEE ALSO:

Articles

Data Categories

KnowledgeArticle

KnowledgeArticleVersion

KnowledgeArticleViewStat

Lead

Represents a prospect or lead.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `merge()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. For details on compound address fields, see Address Compound Fields.
`AnnualRevenue`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Annual revenue for the lead’s company.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the lead’s address.
`CleanStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates the record’s clean status compared with Data.com. Values include: `Matched`, `Different`, `Acknowledged`, `NotFound`, `Inactive`, `Pending`, `SelectMatch`, or `Skipped`.

Field	Details
	Several values for `CleanStatus` appear with different labels on the lead record. • `Matched` appears as `In Sync` • `Acknowledged` appears as `Reviewed` • `Pending` appears as `Not Compared`
`Company`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The lead's company. Note: If person account record types have been enabled, and if the value of `Company` is null, the lead converts to a person account.
`CompanyDunsNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Data Universal Numbering System (D-U-N-S) number, which is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. Industries and companies use D-U-N-S numbers as a global standard for business identification and tracking. Maximum size is 9 characters. Note: This field is only available to organizations that use Data.com Prospector or Data.com Clean.
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than

Field	Details
	15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`ConvertedAccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Object reference ID that points to the account into which the lead converted.
`ConvertedContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Object reference ID that points to the contact into which the lead converted.
`ConvertedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date on which this lead was converted.
`ConvertedOpportunityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Object reference ID that points to the opportunity into which the lead has been converted.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's country.
`CountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The ISO country code for the lead's address.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The lead's description.
`Division`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** A logical segment of your organization's data. For example, if your company is organized into different business units, you could create a division for each business unit, such as "North America," "Healthcare," or "Consulting." Available only if the organization has the Division permission enabled.
`Email`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's email address.
`EmailBouncedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the lead bounced, the date and time of the bounce.

Field	Details
EmailBouncedReason	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** If bounce management is activated and an email sent to the lead bounced, the reason for the bounce.
Fax	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's fax number.
FirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's first name up to 40 characters.
HasOptedOutOfEmail	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update **Description** Indicates whether the lead opted out of email (`true`) or not (`false`). Label is **Email Opt Out**.
GeocodeAccuracy	**Type** picklist **Properties** Retrieve, Query, Restricted picklist, Nillable **Description** Accuracy level of the geocode for the address. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
IndividualId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description ID of the data privacy record associated with this lead. This field is available if you enabled Data Protection and Privacy in Setup.
`Industry`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Industry in which the lead works.
`IsConverted`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the lead has been converted (`true`) or not (`false`). Label is **Converted**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsUnreadByOwner`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If true, lead has been assigned, but not yet viewed. See Unread Leads for more information. Label is **Unread By Owner**.
`Jigsaw`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** References the ID of a contact in Data.com. If a lead has a value in this field, it means that a contact was imported as a lead from Data.com. If the contact (converted to a lead) was not

Field	Details
	imported from Data.com, the field value is null. Maximum size is 20 characters. Available in API version 22.0 and later. Label is **Data.com Key**. Important: The `Jigsaw`field is exposed in the API to support troubleshooting for import errors and reimporting of corrected data. Do not modify the value in the `Jigsaw` field.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is the most recent of either: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Last name of the lead up to 80 characters.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `Longitude` to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`LeadSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's source.
`MasterRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If this record was deleted as the result of a merge, this field contains the ID of the record that was kept. If this record was deleted for any other reason, or has not been deleted, the value is `null`. Note: When using Apex triggers to determine which record was deleted in a merge event, this field's value is the ID of the record that remains in `Trigger.old`. In `Trigger.new`, the value is `null`.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's middle name up to 40 characters. To enable this field, ask Salesforce Customer Support for help.

Field	Details
MobilePhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's mobile phone number.
Name	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName`, `MiddleName`, `LastName`, and `Suffix` up to 121 characters.
NumberOfEmployees	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number of employees at the lead's company. Label is **Employees**.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the lead's owner.
PartnerAccountId	**Type** reference **Properties** Filter, Nillable **Description** ID of the partner account for the partner user that owns this lead. Available if Partner Relationship Management is enabled or if Communities is enabled and you have partner portal licenses. Note: If you are uploading leads using API version 15.0 or earlier, and one of the leads in the batch has a partner user as the owner, the `Partner Account` field on all leads in the batch is set to that partner user's account regardless of whether the partner user is the owner. In version 16.0, the `Partner Account` field is set

Field	Details
	to the appropriate account for the partner user that owns the lead. If the owner of the lead is not a partner user, this field remains empty.
`Phone`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's phone number.
`PhotoUrl`	**Type** url **Properties** Filter, Group, Sort **Description** Path to be combined with the URL of a Salesforce instance (*Example:* https://`yourInstance`.salesforce.com/) to generate a URL to request the social network profile image associated with the lead. Generated URL returns an HTTP redirect (code 302) to the social network profile image for the lead. Empty if Social Accounts and Contacts isn't enabled or if Social Accounts and Contacts has been disabled for the requesting user.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the address of the lead. Label is **Zip/Postal Code**.
`Rating`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Rating of the lead.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.

Field	Details
`Salutation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salutation for the lead.
`ScoreIntelligenceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the intelligent field record that contains lead score.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the address of the lead.
`StateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the lead's address.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Status code for this converted lead. Status codes are defined in `Status` and represented in the API by the LeadStatus object.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Street number and name for the address of the lead.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The lead's name suffix up to 40 characters. To enable this field, ask Salesforce Customer Support for help.
`Title`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Title for the lead, such as CFO or CEO.
`Website`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Website for the lead.

Note: If you import lead data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Converted Leads

Leads have a special state to indicate that they have been converted into an account, a contact, and an opportunity. Your client application can convert leads via the `convertLead()` call. Users can also convert leads in Salesforce. After a lead has been converted, it is read-only. However, you can query converted lead records.

Leads have several fields that indicate their converted status. These special fields are set when converting the lead in the user interface.

- `ConvertedAccountId`
- `ConvertedContactId`
- `ConvertedDate`
- `ConvertedOpportunityId`
- `IsConverted`
- `Status`

Note: If person account record types have been enabled, and if the value of `Company` is null, the lead converts to a person account.

Unread Leads

Leads have a special state to indicate that they have not been viewed or edited by the lead owner. In Salesforce, this is helpful for users to know which leads have been assigned to them but which they have not touched yet. `IsUnreadByOwner` is `true` if the lead owner has not yet viewed or edited the lead, and `false` if the lead owner has viewed or edited the lead at least once.

Lead Status Picklist

Each `Status` value corresponds to either a converted or unconverted status in the lead status picklist, as defined in the user interface. To obtain the lead status values in the picklist, a client application can query LeadStatus.

You can't convert a lead via the API by changing `Status` to one of the converted lead status values. When you convert qualified leads into an account, contact, and opportunity, you can select one of the converted status types for the lead. Leads with a converted status type are no longer available in the Leads tab, although you can include them in reports.

Usage

To update a lead or to convert one with `convertLead()`, log in to your client application with the "Edit" permission on leads.

When you create, update, or upsert a lead, your client application can have the lead assigned to multiple user records based on assignment rules that have been configured in Salesforce.

To use this feature, your client application needs to set either of the following options (but not both) in the AssignmentRuleHeader used in create or update:

Field	Field Type	Details
`assignmentRuleId`	reference	ID of the assignment rule to use. Can be an inactive assignment rule. If unspecified and `useDefaultRule` is `true`, then the default assignment rule is used. To find the ID for a given assignment rule, query the AssignmentRule object (specifying `RuleType="leadAssignment"`), iterate through the returned AssignmentRule records, find the one you want to use, retrieve its ID, and then specify its ID in this field in the AssignmentRuleHeader.
`useDefaultRule`	boolean	Specifies whether to use the default rule for rule-based assignment (`true`) or not (`false`). Default rules are assigned in the user interface.

Java Sample

The following Java sample shows how to automatically assign a newly created lead.

```
package wsc;

import com.sforce.soap.enterprise.Connector;
import com.sforce.soap.enterprise.EnterpriseConnection;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;
```

```
import com.sforce.soap.enterprise.sobject.Lead;
import com.sforce.soap.enterprise.QueryResult;
import com.sforce.soap.enterprise.SaveResult;
import com.sforce.soap.enterprise.sobject.SObject;

public class LeadAssignment {

    static final String USERNAME = "REPLACE USER NAME";
    static final String PASSWORD = "REPLACE PASSWORD";
    static EnterpriseConnection connection;

    static LeadAssignment _leadAssignment;

    // Main
    public static void main(String[] args)
    {
        // Establish connection and login
        ConnectorConfig config = new ConnectorConfig();
        config.setUsername(USERNAME);
        config.setPassword(PASSWORD);
        try {
            connection = Connector.newConnection(config);
            System.out.println("Logged in, endpoint: " + config.getAuthEndpoint());
        } catch (ConnectionException e1) {
            e1.printStackTrace();
        }

        // Create lead
        _leadAssignment = new LeadAssignment();
        try {
            _leadAssignment.CreateLead();
        } catch (Exception e) {
            e.printStackTrace();
        }

        // Logout
        try {
            connection.logout();
            System.out.println("Logged out");
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        }
    }

    public void CreateLead() throws ConnectionException
    {
        // Create a new Lead and assign various properties
        Lead lead = new Lead();

        lead.setFirstName("Joe");
        lead.setLastName("Smith");
        lead.setCompany("ABC Corporation");
        lead.setLeadSource("API");
        // The lead assignment rule will assign any new leads that
```

```
        // have "API" as the LeadSource to a particular user

        // In this sample we will look for a particular rule and if found
        // use the id for the lead assignment. If it is not found we will
        // instruct the call to use the current default rule. You can't use
        // both of these values together.
        QueryResult qr = connection.query("SELECT Id FROM AssignmentRule WHERE Name = " +

                                "'Mass Mail Campaign' AND SobjectType = 'Lead'");
        if (qr.getSize() == 0) {
            connection.setAssignmentRuleHeader(null, true);
        } else {
            connection.setAssignmentRuleHeader(qr.getRecords()[0].getId(), false);
        }

        // Every operation that results in a new or updated lead will
        // use the specified rule until the header is removed from the
        // connection.
        SaveResult[] sr = connection.create(new SObject[] {lead});
        for (int i=0;i<sr.length;i++) {
            if (sr[i].isSuccess()) {
                System.out.println("Successfully created lead with id of: " +
                                   sr[i].getId() + ".");
            } else {
                System.out.println("Error creating lead: " +
                                   sr[i].getErrors()[0].getMessage());
            }
        }

        // This call effectively removes the header, the next lead will
        // be assigned to the default lead owner.
        connection.clearAssignmentRuleHeader();
    }
}
```

C# Sample

The following C# sample shows how to automatically assign a newly created lead.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.ServiceModel;
using LeadSample.sforce;

namespace LeadSample
{
    class LeadAssignment
    {
        private static SoapClient client;
        private static SoapClient apiClient;
        private static SessionHeader header;
```

```
private static LoginResult loginResult;
private static readonly string Username = "REPLACE USERNAME";
private static readonly string Password = "REPLACE PASSWORD AND SECURITY TOKEN";

// Create the proxy binding and login
private LeadAssignment()
{
    client = new SoapClient();

    try
    {
        loginResult = client.login(null, Username, Password);
    }
    catch (Exception e)
    {
        Console.WriteLine("Unexpected login error: " + e.Message);
        Console.WriteLine(e.StackTrace);
        return;
    }
    // Access API endpoint and create new client
    header = new SessionHeader();
    header.sessionId = loginResult.sessionId;
    apiClient = new SoapClient("Soap", loginResult.serverUrl);
}

[STAThread]
static void Main(string[] args)
{
    LeadAssignment leadAssignment = new LeadAssignment();
    try
    {
        leadAssignment.CreateLead();
    }
    catch (Exception e)
    {
        Console.WriteLine(e.Message);
        Console.WriteLine(e.StackTrace);
        Console.WriteLine(e.InnerException);
    }
    // logout
    client.logout(header);
}

public void CreateLead()
{
    // Create a new Lead and assign various properties
    Lead lead = new Lead();

    lead.FirstName = "John";
    lead.LastName = "Brown";
    lead.Company = "ABC Corporation";
    lead.LeadSource = "Advertisement";
    // Setting the lead source for a pre-existing lead assignment rule. This
    // rule was created outside of this sample and will assign any new leads
```

```
// that have "Advertisement" as the LeadSource to a particular user.

// Create the assignment rule header and add it to the proxy binding
AssignmentRuleHeader arh = new AssignmentRuleHeader();

// In this sample we will look for a particular rule and if found
// use the id for the lead assignment. If it is not found we will
// instruct the call to use the current default rule. Both these
// values can't be used together.
QueryResult qr = null;
string query = "SELECT Id FROM AssignmentRule WHERE Name = " +
    "'Mass Mail Campaign' AND SobjectType = 'Lead'";
try
{
    LimitInfo[] limitArray = apiClient.query(
        header, // sessionheader
        null,   // queryoptions
        null,   // mruheader
        null,   // packageversionheader
        query,  // SOQL query
        out qr);
}
catch (Exception e)
{
    Console.WriteLine("Unexpected query error: " + e.Message);
    Console.WriteLine(e.StackTrace);
}
if (qr.size == 0)
{
    arh.useDefaultRule = true;
}
else
{
    arh.assignmentRuleId = qr.records[0].Id;
}

// Create the lead using our Assignment Rule header
LimitInfo[] li;
SaveResult[] sr;
apiClient.create(
    header, // sessionheader
    arh,    // assignmentruleheader
    null,   // mruheader
    null,   // allowfieldtrunctionheader
    null,   // disablefeedtrackingheader
    null,   // streamingenabledheader
    null,   // allornoneheader
    null,   // duplicateruleheader
    null,   // localeoptions
    null,   // debuggingheader
    null,   // packageversionheader
    null,   // emailheader
    new sObject[] { lead },
    out li,
```

```
                out sr);
            foreach (SaveResult s in sr)
            {
                if (s.success)
                {
                    Console.WriteLine("Successfully created Lead with ID: {0}", s.id);
                }
                else
                {
                    Console.WriteLine("Error creating Lead: {0}", s.errors[0].message);
                }
            }
        }
    }
}
```

SEE ALSO:

LeadOwnerSharingRule

LeadShare

LeadStatus

PartnerNetworkConnection

LeadCleanInfo

Stores the metadata Data.com Clean uses to determine a lead record's clean status. Helps you automate the cleaning or related processing of lead records.

Lead Clean Info provides a snapshot of the data in your Salesforce lead record and its matched Data.com record at the time the Salesforce record was cleaned.

Lead Clean Info includes a number of bit vector fields, whose component fields each correspond to individual object fields and provide related data or status information about those fields. For example, the bit vector field `IsDifferent` has an `IsDifferentTitle` field. If the `IsDifferentTitle` field's value is `False`, that means the `Title` field value is *the same* on the Salesforce lead record and its matched Data.com record.

LeadCleanInfo bit vector fields include:

- `CleanedBy` indicates who (a user) or what (a Clean job) cleaned the lead record.
- `IsDifferent` indicates whether or not a field on the lead record has a value that differs from the corresponding field on the matched Data.com record.
- `IsFlaggedWrong` indicates whether or not a field on the lead record has a value that is flagged as wrong to Data.com.
- `IsReviewed` indicates whether or not a field on the lead record is in a `Reviewed` state, which means that the value was reviewed but not accepted..

Their individual bits are defined here

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
Address	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
AnnualRevenue	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated annual revenue of the lead.
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
CleanedByJob	**Type** boolean **Properties** Filter **Description** Indicates whether the lead record was cleaned by a Data.com Clean job (`true`) or not (`false`).
CleanedByUser	**Type** boolean **Properties** Filter **Description** Indicates whether the lead record was cleaned by a Salesforce user (`true`) or not (`false`).
CompanyDunsNumber	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The Data Universal Numbering System (D-U-N-S) number is a unique, nine-digit number assigned to every business location in the Dun & Bradstreet database that has a unique, separate, and distinct operation. D-U-N-S numbers are used by industries and organizations around the world as a global standard for business identification and tracking.
`CompanyName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the company.
`ContactStatusDataDotCom`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The status of the contact associated with the lead per Data.com. Values are: `Contact is Active per Data.com`, `Phone is Wrong per Data.com` , `Email is Wrong per Data.com`, `Phone and Email are Wrong per Data.com`, `Contact Not at Company per Data.com`, `Contact is Inactive per Data.com`, `Company this contact belongs to is out of business per Data.com`, `Company this contact belongs to never existed per Data.com` or `Email address is invalid per Data.com`.
`Country`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`DandBCompanyDunsNumber`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The D-U-N-S Number on the D&B Company record (if any) that is linked to the lead.
DataDotComCompanyId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the company associated with the lead.
DataDotComId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID Data.com maintains for the contact associated with the lead.
Email	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The lead's email address.
FirstName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead's first name.
Industry	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The industry the lead belongs to.
IsDifferentAnnualRevenue	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the lead’s `AnnualRevenue` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCity`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead’s `City` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead’s `Company D-U-N-S Number` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCompanyName`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead’s `Company Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountry`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead’s `Country` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentCountryCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `Country Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `D&B Company D-U-N-S Number` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentEmail`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Email` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentFirstName`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `First Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentIndustry`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Industry` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentLastName`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the lead's `Last Name` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentNumberOfEmployees`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `No. of Employees` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPhone`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Phone` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentPostalCode`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Postal Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentState`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `State` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStateCode`	**Type** boolean

Field Name	Details
	Properties Filter **Description** Indicates whether the account's `State Code` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentStreet`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Street` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsDifferentTitle`	**Type** boolean **Properties** Filter **Description** Indicates whether the lead's `Title` field value is different from the corresponding value on its matched Data.com record (`true`) or not (`false`).
`IsFlaggedWrongAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Address` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongAnnualRevenue`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Annual Revenue` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Company D-U-N-S Number` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Email` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongIndustry`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Industry` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Name` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongNumberOfEmployees`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `No. of Employees` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Phone` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsFlaggedWrongTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Title` field value is flagged as wrong to Data.com (`true`) or not (`false`).
`IsInactive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the lead has been reported to Data.com as *`Inactive`* (`true`) or not (`false`).
`IsReviewedAddress`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Address` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedAnnualRevenue`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Annual Revenue` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company D-U-N-S Number` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedCompanyName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Company Name` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedDandBCompanyDunsNumber`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `D&B Company D-U-N-S Number` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedEmail`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Email` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedIndustry`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Indicates whether the lead's `Industry` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedName`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Name` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedNumberOfEmployees`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `No. of Employees` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedPhone`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Phone` field value is in a `Reviewed` state (`true`) or not (`false`).
`IsReviewedTitle`	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the lead's `Title` field value is in a `Reviewed` state (`true`) or not (`false`).
`LastMatchedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The date the lead record was last matched and linked to a Data.com record.

Field Name	Details
LastName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead's last name.
LastStatusChangedById	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of who or what last changed the record's `Clean Status` field value: a Salesforce user or a Clean job.
LastStatusChangedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date on which the record's `Clean Status` field value was last changed.
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of a billing address. Data not currently provided.
LeadId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique, system-generated ID assigned when the lead record was created.
Longitude	**Type** double **Properties** Filter, Nillable, Sort

Field Name	Details
	Description Used with `Latitude` to specify the precise geolocation of a billing address. Data not currently provided.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Field label is **Lead Clean Info Name**. The name of the lead. Maximum size is 255 characters.
`NumberOfEmployees`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of employees working at the lead.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number for the lead.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`State`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`Street`	**Type** textarea

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Details for the billing address of the lead.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The lead’s title.

Usage

Developers can create triggers that read the Lead Clean Info fields to help automate the cleaning or related processing of lead records.

LeadFeed

Represents a single feed item in the feed displayed on the detail page for a lead record. This object is available in API version 18.0 and later.

A lead feed shows recent changes to a lead record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to leads in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn’t create, you must have one of these permissions:

- “Modify All Data”
- “Modify All” on the Lead object
- “Moderate Chatter”

Note: Users with the “Moderate Chatter” permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of LeadFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable

Field	Details
	Description Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>`

Field	Details
	Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` **Note:** In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url

Field	Details
	Properties Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the lead record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.

Field	Details
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a lead record. If a lead record is converted, use this object to query and retrieve the associated lead feed items.

SEE ALSO:

- Lead
- EntitySubscription
- NewsFeed
- UserProfileFeed

LeadHistory

Represents the history of changes to the values in the fields of a lead.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LeadId`	**Type** reference **Properties** Filter, Group, Sort

Field	Details
	Description ID of the Lead. Label is **Lead ID**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to a lead.

This object respects field level security on the parent object.

SEE ALSO:

LeadShare

LeadStatus

LeadOwnerSharingRule

Represents the rules for sharing a lead with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Leads owned by users in the source group trigger the rule to give access.
`LeadAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read`

Field	Details
	• `Edit`
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

Usage

Use these objects to manage the sharing rules for leads. General sharing and Territory-related sharing use this object.

SEE ALSO:

Lead

LeadShare

LeadStatus

Metadata API Developer Guide: SharingRules

LeadShare

Represents a sharing entry on a Lead.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
LeadAccessLevel	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the User or Group has to the Lead. The possible values are: • `Read` • `Edit` • `All` This value is not valid when creating or updating these records. This field must be set to an access level that is higher than the organization's default access level for leads.
LeadId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Lead associated with this sharing entry. This field can't be updated.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write a value in this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Lead with them. • `Owner`—The User is the owner of the Lead. • `Rule`—The User or Group has access via a Lead sharing rule.

Field	Details
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Lead. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit leads owned by other users.

If you attempt to create a record that matches an existing record, the existing record is returned.

SEE ALSO:

AccountShare

Case

CaseShare

OpportunityShare

LeadStatus

Represents the status of a Lead, such as Open, Qualified, or Converted.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsConverted`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether this lead status value represents a converted lead (`true`) or not (`false`). Multiple lead status values can represent a converted lead.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default lead status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this lead status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the lead status picklist. These numbers are not guaranteed to be sequential, as some previous lead status values might have been deleted.

Usage

This object represents a value in the lead status picklist (see Lead Status Picklist). The lead status picklist provides additional information about the status of a Lead, such as whether a given status value represents a converted Lead. Query this object to retrieve the set of values in the lead status picklist, and then use that information while processing Lead objects to determine more information about a given lead. For example, the application could test whether a given lead is converted based on its `Status` value and the value of the `IsConverted` property in the associated LeadStatus record.

SEE ALSO:

LeadOwnerSharingRule

LeadShare

LeadTag

Associates a word or short phrase with a Lead.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization.

Field Name	Details
	• `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

LeadTag stores the relationship between its parent TagDefinition and the Lead being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

LimitAllocationPerApp

Represents a connected app quota for an API limit. This object is available in API version 30.0 and later.

Note: LimitAllocationPerApp is currently available through a pilot program. For information on enabling LimitAllocationPerApp for your organization, contact Salesforce.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ConnectedAppName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the connected app.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
`LimitType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of API limit for which you're setting a quota. The available values are: • TotalRequests—Total API requests per 24-hour period • ApiBatchItems—Number of Bulk API batches per 24-hour period • StreamEventsPerDay—Number of Streaming API events per 24–hour period • GenStreamingEventsPerDay—Number of generic streaming events per 24–hour period **Note:** Generic streaming is currently available through a pilot program. For information on enabling generic streaming for your organization, contact Salesforce.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Master label for the API limit quota. This is the internal label that does not get translated.
`Percentage`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The percentage of the API limit reserved for the connected app. The app can't consume more than this percentage of the API limit.

Field Name	Details
	You can find the available percentage for each limit type through the user interface or by using the `query()` call.

Usage

App quotas for API limits enable you to reserve API capacity for mission-critical connected apps or set a ceiling for API usage of non-critical connected apps.

LineitemOverride

A forecast override of a line item on an Opportunity. This read-only object for customizable forecasting has a child-parent relationship with OpportunityOverride.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is only accessible if your organization has enabled the customizable forecasting feature, which can be done in the user interface. Requires the "View All Data" permission.

Fields

Field	Details
`AmountInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden amount rolls up through the forecast hierarchy (`true`), or was overridden by the owner of this record (`false`).
`ForecastCategoryInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden forecast category rolls up through the forecast hierarchy (`true`), or was overridden by the owner of this record (`false`).

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated Opportunity.
OpportunityLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated OpportunityLineItem.
OverrideAmount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The total monetary amount of the line item, which may be overridden.
OverrideForecastCategory	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The forecast category of the line item. Can be overridden.
OverrideQuantity	**Type** double **Properties** Create, Filter, Sort, Update

Field	Details
	Description The quantity of the line item, which may be overridden.
`OverrideUnitPrice`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The monetary amount of the unit price. Can be overridden.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** ID of the owner of this record.
`QuantityInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden quantity rolls up through the forecast hierarchy (`true`), or is overridden by the owner of this record (`false`).
`UnitPriceInherited`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the overridden unit price rolls up through the forecast hierarchy (`true`), or was overridden by the owner of this record (`false`).

SEE ALSO:

OpportunityOverride

LinkedArticle

Represents a knowledge article that is attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Knowledge must be set up in your org, and Field Service Lightning must be enabled.

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`KnowledgeArticleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the Knowledge article attached to the record. The label in the user interface is Knowledge Article ID.
`KnowledgeArticleVersionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The version of the Knowledge article attached to the record. This field lists the title of the attached version and links to the version. The label in the user interface is Article Version. When you attach an article to a work order, that version of the article stays associated with the work order, even if later versions are published. If needed, you can detach and reattach an article to a work order to link the latest version.
`LinkedEntityId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The ID of the record that the Knowledge article is attached to. The label in the user interface is Linked Record ID.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The title of the article. The label in the user interface is Article Title.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the article's record type, if used.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The type of record that the Knowledge article is attached to. For example, work order. The label in the user interface is Linked Object Type.

Usage

Admins can customize linked articles' page layouts, fields, validation rules, and more from the Linked Articles page in Setup.

LinkedArticleFeed

Represents a single feed item on a linked knowledge article attached to a work order, work order line item, or work type. This object is available in API version 37.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be set up in your org.

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with the feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via the SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags. • `<p>`

Field Name	Details
	Tip: Although the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of Likes associated with the feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether the feed item is available in the default community, a specific community, or all communities.
ParentId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description The ID of the object type to which the feed item is related. For example, set this field to a `UserId` to post to someone's profile feed. Or set it to an `AccountId` to post to a specific account.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** The ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or only internal users.

LinkedArticleHistory

Represents the history of changes made to tracked fields on a linked article. This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Knowledge must be set up in your org.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`LinkedArticleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the tracked linked article. The history is displayed on the detail page for this record.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.

ListEmail

Represents a list email in Salesforce. Available in API version 41.0 and later. Has a one-to-many relationship with ListEmailRecipientSource.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`,`search()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`FromAddress`	**Type** string **Properties** Create Filter Update **Description** Read-only except when list email is in draft state. Validated against user's addresses.
`FromName`	**Type** string **Properties** Create Filter Nillable Update **Description** Read-only except when list email is in draft state. Validated against user's addresses.
`HasAttachment`	**Type** boolean **Properties** Defaulted on create Filter Group Sort **Description** Read-only. Defaulted on create and update. Value is `true` if the list email has an attachment.

Field	Details
HtmlBody	**Type** string **Properties** Create Nillable Update **Description** The body of the list email.
LastReferencedDate	**Type** dateTime **Properties** Filter Nillable Sort **Description** The timestamp that indicates when the current user last viewed a record that is related to this list email.
LastViewedDate	**Type** dateTime **Properties** Filter Nillable Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create Filter Group idLookup Sort Update **Description** Read-only except when list email is in draft state.

Field	Details
OwnerId	**Type** reference **Properties** Create Defaulted on create Filter Group Sort Update **Description** References Group and User.
ScheduledDate	**Type** dateTime **Properties** Filter Nillable Sort **Description** Read-only. If null and `Status` is set to Scheduled, defaults to created time.
Status	**Type** picklist **Properties** Create Filter Group Restricted picklist Sort Update **Description** Read-only except when list email is in draft state. Changing the status to Scheduled causes the list email to be sent. Valid values: • Draft • Scheduled • Sent • Limit Error

Field	Details
	• Canceled
`Subject`	**Type** string **Properties** Create Filter Nillable Update **Description** Read-only except when list email is in draft state.
`TextBody`	**Type** string **Properties** Create Nillable Update **Description** Read-only except when list email is in draft state.
`TotalSent`	**Type** int **Properties** Filter Group Nillable Sort **Description** Read-only. The total number of list emails sent, including bounced, opted-out, and invalid To: addresses.

ListEmailRecipientSource

For a list email in Salesforce, represents the source of a recipient's email. Available in API version 41.0 and later.

The visibility and accessibility of this object is inherited from the related list email.

Supported Calls

`create()`, `delete()`, `query()`, `getDeleted()`, `getUpdated()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`ListEmailId`	**Type** reference **Properties** Create Filter Group Sort **Description** The related list email record. Required on record creation; read-only otherwise.
`Name`	**Type** string **Properties** Autonumber Defaulted on create Filter idLookup Sort **Description** The auto-generated name of the list email recipient source.
`SourceListId`	**Type** reference **Properties** Create Filter Group Sort Update **Description** Required. The id of a list view to send the list email to. Read-only except when list email is in draft state.

Field	Details
SourceType	**Type** reference **Properties** Create Filter Group Restricted picklist Sort Update **Description** Required. Read-only except when list email is in draft state. Valid values: • Include

ListView

Represents a list view. A list view specifies a set of records for an object, based on specific criteria. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Name	Details
DeveloperName	**Type** string **Properties** Filter, Query, Retrieve, Sort **Description** The fully qualified developer name of the list view.
IsSoqlCompatible	**Type** boolean **Properties** Filter, Query, Retrieve, Sort

Name	Details
	Description Whether the list view can be used with SOQL..
`LastModifiedBy`	**Type** User **Properties** Filter, Query, Retrieve, Sort **Description** The name of the user who last modified the list view.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Query, Retrieve, Sort **Description** The date and time when the list view was last referenced, with a precision of one second.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Query, Retrieve, Sort **Description** The date and time when the list view was last viewed, with a precision of one second.
`Name`	**Type** string **Properties** Filter, Query, Retrieve, Sort **Description** The name of the list view.
`NamespacePrefix`	**Type** string **Properties** Filter, Query, Retrieve, Sort **Description** The namespace of the list view.
`SobjectType`	**Type** picklist

Name	Details
	Properties Filter, Query, Retrieve, Sort **Description** The API name of the sObject for the list view.

ListViewChart

Represents a graphical chart that's displayed on Salesforce for Android, iOS, and mobile web list views. The chart aggregates data that is filtered based on the list view that's currently displayed. This object is available in API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Description
`AggregateField`	**Type** string **Properties** Create, Filter, Query, Restricted picklist, Retrieve, Sort, Update **Description** The field that's used for calculating data on each group. `AggregateField` can't be the same as `GroupingField`.
`AggregateType`	**Type** picklist **Properties** Create, Filter, Query, Retrieve, Sort, Update **Description** The type of calculations to run on each group. The supported `AggregateType` values are `Count`, `Sum`, and `Avg`.
`ChartType`	**Type** picklist **Properties** Create, Filter, Query, Retrieve, Sort, Update **Description** The type of chart to create. The supported chart types are horizontal bar chart, vertical bar chart, and donut chart.

Name	Description
DeveloperName	**Type** string **Properties** Create, Filter, Query, Retrieve, Sort, Update **Description** The fully qualified developer name of the chart.
GroupingField	**Type** string **Properties** Create, Filter, Query, Retrieve, Sort, Update **Description** The field that's used to divide the data into collections. The field has to be supported by SOQL `GROUP BY` functionality. `GroupingField` can't be the same as `AggregateField`.
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the `MasterLabel`.
MasterLabel	**Type** string **Properties** Create, Filter, Query, Retrieve, Sort, Update **Description** The label for the chart.
OwnerId	**Type** ID **Properties** Defaulted on create, Filter, Query, Retrieve, Sort **Description** The ID of the user who owns the chart.
SobjectType	**Type** string **Properties** Create, Filter, Query, Retrieve, Sort

Name	Description
	Description The API name of the sObject for the chart.

ListViewChartInstance

Retrieves metadata for all standard and custom charts for a given entity in context of a given list view. This object is available in API versions 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`AggregateField`	**Type** string **Properties** Filter, Group, Sort **Description** The field that's used for calculating data on each group. `AggregateField` can't be the same as `GroupingField`.
`AggregateType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of calculations to run on each group. The supported `AggregateType` values are `Count`, `Sum`, and `Avg`.
`ChartType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of chart to create. The supported chart types are horizontal bar chart, vertical bar chart, and donut chart.

Field Name	Details
DataQuery	**Type** textarea **Properties** Filter, Nillable, Sort **Description** The SOQL query that can be executed to fetch the data for drawing a chart.
DataQueryWithoutUserFilters	**Type** textarea **Properties** Filter, Nillable, Sort **Description** The SOQL query that can be executed to fetch the data for drawing a chart, without user filters. Available in API v43.0 and later.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** API name of the chart. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
ExternalId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Reserved for future use.
GroupingField	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The field that's used to divide the data into collections. The field has to be supported by SOQL `GROUP BY` functionality. `GroupingField` can't be the same as `AggregateField`.
`IsDeletable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the chart can be deleted.
`IsEditable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if the chart can be edited. Standard charts are not editable.
`IsLastViewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates if a chart is the last viewed by a user.
`Label`	**Type** string **Properties** Filter, Group, Sort **Description** The display name of the chart.
`ListViewChartId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the chart created by a user. For standard charts, this is null.
`ListViewContextId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** ID of the list view in context of which the chart is generated. Required to query `ListViewChartInstance`.
`SourceEntity`	**Type** string **Properties** Filter, Group, Sort **Description** API name of the entity to which the chart is related. Required to query `ListViewChartInstance`.

Usage

Example 1. Retrieve all custom and standard charts for Account entity for All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextId='00BR0000000U8Hr'
```

Example 2. Retrieve metadata for a specific custom chart by ID for Account entity and All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextID='00BR0000000U8Hr' and ListViewChartId='0DdR00000004CBxKAM'
```

Example 3. Retrieve metadata for a specific standard chart by its developer name for Account entity and All Accounts list view

```
SELECT AggregateField, AggregateType, ChartType, DataQuery, DeveloperName, ExternalId,
 GroupingField, Id, IsDeletable, IsEditable, IsLastViewed, Label, ListViewChartId,
ListViewContextId, SourceEntity FROM ListViewChartInstance WHERE SourceEntity='Account'
 and ListViewContextID='00BR0000000U8Hr' and DeveloperName='AccountsByIndustry'
```

LiveAgentSession

This object is automatically created for each Life Agent session and stores information about the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Fields

Field Name	Details
AgentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the agent associated with the session.
ChatReqAssigned	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that were assigned to an agent during a session.
ChatReqDeclined	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that were declined by an agent during a session.
ChatReqEngaged	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chats in which an agent was engaged during a session.
ChatReqTimedOut	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of chat requests that timed out in an agent's queue during a session.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last viewed.
LoginTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time an agent logged in during the session.
LogoutTime	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time an agent logged out during a session.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookupSort **Description** The name of the session.
NumFlagLoweredAgent	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags lowered by the agent.

Field Name	Details
NumFlagLoweredSupervisor	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags lowered by the supervisor.
NumFlagRaised	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of assistance flags raised by the agent.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the session record.
TimeAtCapacity	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent with the maximum number of chats in his or her queue.
TimeIdle	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent idle during the session.
TimeInAwayStatus	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The amount of time an agent spent with a status of "Away" during a session.
`TimeInChats`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent engaged in chats during a session.
`TimeInOnlineStatus`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time an agent spent with a status of "Online" during a session.

Usage

Use this object to query and manage live chat session records.

LiveAgentSessionHistory

This object is automatically created for each Life Agent session and stores information about changes made to the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The name of the field that was changed in a session record.
`LiveAgentSessionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the session record that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The original value of the field that was changed.

Usage

Use this object to identify changes to live chat session records.

LiveAgentSessionOwnerSharingRule

Represents the rules for sharing a Life Agent session record with users other than the record owner. This object is available in API version 28.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, restrictedPicklist, Sort, Update **Description** Determines the level of access users have to session records. Specifies whether or not users can read, edit, or transfer session records. Corresponds to the Default Access column in the UI.
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to Rule Name in the UI. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Session records owned by users in the source group trigger the rule to give access.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup,Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to Label in the UI.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

Usage

Use this object to manage the sharing rules for Life Agent session records.

SEE ALSO:

Metadata API Developer Guide: SharingRules

LiveAgentSessionShare

This object is automatically created for each Life Agent session and stores information about the session. This object is available in API versions 28.0 and later.

Note: Standard fields for the LiveAgentSession object can only be modified if your administrator has given you editing permissions for these records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the LiveAgentSession. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for live chat transcripts.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values can include: • `Manual`—The user or group has access because a user with "All" access manually shared the LiveAgentSession with them. • `Owner`—The user is the owner of the LiveAgentSession or is in a role above the QuickText owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the LiveAgentSession.

Usage

This object lets you determine which users and groups can view and edit LiveAgentSession records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

LiveChatBlockingRule

Represents a rule for blocking chat visitors' IP addresses from starting new chats with agents. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Nillable, Update **Description** The description of the blocking rule—for example, the reason why the given IP address or range of addresses is being banned from starting new chats.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field Name	Details
`FromIpAddress`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The IP address of the user that you want to block, or the beginning of the range of IP addresses you want to block. If you want to block a range of IP addresses, indicate the end of the range in the `ToIpAddress` field. If you don't indicate an IP address in the `ToIpAddress` field, the only IP address that will be blocked is the IP address in the `FromIpAddress` field.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the blocking rule.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the blocking rule.
`ToIpAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** (Optional) The end of the range of IP addresses that you want to block. The range begins with and includes the IP address in the `FromIpAddress` field, and it ends with and includes the IP address in the `ToIpAddress` field.

Usage

Use this object to query and manage rules for blocking customers from starting new chats with agents.

LiveChatButton

Represents a button that allows visitors to request chats with Life Agent users. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Animation`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of animation used when an automated chat invitation appears on-screen. For automated chat invitations only. Available in API version 29.0 and later.
`AutoGreeting`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** The text that is automatically sent from an agent to a visitor when a chat session starts. Note: A greeting message in the `AutoGreeting` field of the LiveChatButton object overrides individual users' greeting messages in the `AutoGreeting` field in the LiveChatUserConfig object.
`ChasitorIdleTimeout`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time a customer has to respond to an agent message before the chat times out.
`ChasitorIdleTimeoutWarning`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time a customer has to respond to an agent message before a warning appears and a timer begins a countdown. This value must be shorter than the `ChasitorIdleTimeout` value (we recommend at least 30 seconds shorter).

Field Name	Details
`ChatPageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the custom Visualforce page that contains the custom chat window code.
`CustomAgentName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The custom name of the agent associated with the button. Available in API version 29.0 and later. Note: A custom agent name in the `CustomAgentName` field of the LiveChatButton object overrides individual users' custom agent name in the `CustomAgentName` field in the LiveChatUserConfig object.
`CustomRoutingClassId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the Apex class you customize to create your custom routing rules if `RoutingType` equals `Custom`. Available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field Name	Details
HasQueue	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether to allow incoming chat requests to queue until an agent is available.
InviteEndPosition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The position on-screen where an automated chat invitation's animation ends. Note: You don't need to select an end position for your automated chat invitation if you use a custom animation. For automated chat invitations only. Available in API version 29.0 and later.
InviteImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the static image resource displayed on your automated chat invitation. For automated chat invitations only. Available in API version 29.0 and later.
InviteStartPosition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The position on-screen where an automated chat invitation's animation begins. Note: You don't need to select a start position for your automated chat invitation if you use a custom animation. For automated chat invitations only. Available in API version 29.0 and later.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description For automated chat invitations, specifies whether an automated chat invitation is active and able to be sent to customers (`true`) or not (`false`). For chat buttons, this is set to `true` by default.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the chat.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the live chat button.
`NumberOfReroutingAttempts`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the number of times a chat request can be rerouted to available agents if all agents reject the chat request.
`OfflineImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the static image resource that is displayed when the button is offline (inactive).
`OnlineImageId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the static image resource that is displayed when the button is online (active).

Field Name	Details
`OptionsHasChasitorIdleTimeout`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether Customer Time-Out is enabled.
`OptionsHasInviteAfterAccept`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether an automated chat invitation can be sent to a customer after that customer has accepted a prior automated chat invitation (`true`) or not (`false`). For automated chat invitations only. Available in API version 29.0 and later.
`OptionsHasInviteAfterReject`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether an automated chat invitation can be sent to a customer after that customer has rejected a prior automated chat invitation (`true`) or not (`false`). For automated chat invitations only. Available in API version 29.0 and later.
`OptionsHasRerouteDeclinedRequest`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether a chat request that has been rejected by all available agents should be rerouted to available agents again (`true`) or not `false`).
`OptionsIsAutoAccept`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether a chat request should be automatically accepted by the agent it's assigned to (`true`) or not `false`). For chat buttons and automated chat

Field Name	Details
	invitations with RoutingType set to Most Available or Least Active. Available in API version 30.0 and later.
OptionsIsInviteAutoRemove	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether an automated chat invitation should be automatically removed from the screen after a certain amount of time (true) or not (false). For automated chat invitations only. Available in API version 29.0 and later.
OverallQueueLength	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maximum number of chat requests allowed to queue.
PerAgentQueueLength	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maximum number of chat requests allowed to queue for each agent with the required skill.
PostchatPageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the custom Visualforce page displayed when the chat ends.
PostchatUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL the user is directed to after the chat ends.

Field Name	Details
PrechatFormPageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the custom Visualforce page displayed before the chat begins.
PrechatFormUrl	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL the user is directed to before the chat begins.
PushTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of seconds an agent has to answer a chat request before it's routed to the next available agent.
RoutingType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** How chat requests are routed to agents. The values are: • Choice—Incoming chat requests are added to the queue in Life Agent in the Salesforce console and are available to any agent with the required skill. • Least Active—Incoming chats are routed to the agent with the required skill who has the fewest active chats. • Most Available—Incoming chats are routed to the agent with the required skill and the greatest difference between chat capacity and active chat sessions. For example, if Agent A and Agent B each have a chat capacity of five, and Agent A has three active chat sessions while Agent B has one, incoming chats will be routed to Agent B. • Omni—Incoming chats are routed using Omni-Channel queues.
SiteId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the site used for loading static resources and custom Visualforce pages.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the skill used to route incoming chat requests. To associate multiple skills with a live chat button, reference one skill in the `SkillId` field and use LiveChatButtonSkill junction objects for the remaining skills.
`TimeToRemoveInvite`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of seconds an automated invitation stays on-screen before it is automatically removed. For automated chat invitations only. Available in API version 29.0 and later.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of element to display to customers (either a chat button or an automated invitation).
`WindowLanguage`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language used for standard chat windows. Custom chat windows use the language of the user's browser.

Usage

Use this object to query and manage live chat buttons and automated chat invitations.

LiveChatButtonDeployment

Associates a Live Agent automated chat invitation with a specific deployment. This object is available in API versions 28.0 and later.

Supported Calls

`create()`, `delete()` `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`ButtonId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the automated invitation associated with the deployment.
`DeploymentId`	**Type** reference **Properties** Create, Filter, Group, NillableSort **Description** The ID of the deployment that will feature the automated invitation.

Usage

Use this object to associate automated chat invitations with specific deployments.

LiveChatButtonSkill

Represents all the skills available to a LiveChatButton except the one currently assigned. To retrieve the skill currently assigned, query LiveChatButton. This object is available in API version 25.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `update()`

Fields

Field Name	Details
`ButtonID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the button.
`SkillID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the skill.

Usage

Use this object to assign a specific skill to a specific button for multi-skill routing. For example:

```
String myButtonId = "button_Id";
String myButtonDevName = "button_DeveloperName";
List<String> skillIds = new List<String>();

//Get one skill ID from button
for(LiveChatButton lcb : [SELECT SkillId FROM LiveChatButton WHERE DeveloperName =:
myButtonDevName]) {
    skillIds.add(lcb.SkillId);
}
//Get remaining skills from LiveChatButtonSkill join object
for(LiveChatButtonSkill lcbs : [SELECT SkillID FROM LiveChatButtonSkill WHERE ButtonId =:
myButtonId]) {
    skillIds.add(lcbs.SkillId);
}
//Retrieve all skills into a single list
List<Skill> skills = [SELECT Id, DeveloperName FROM Skill WHERE Id IN :SkillIds];
```

LiveChatDeployment

Represents the general settings for deploying Life Agent on a website. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`BrandingId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the static image resource that's displayed in the chat window
`ConnectionTimeoutDuration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the amount of time before the chat times out, in seconds.
`ConnectionWarningDuration`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Indicates the amount of time before a time-out warning is displayed to the agent, in seconds.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Domains`	**Type** textarea

Field Name	Details
	Properties Create, Filter (unavailable in API version 25.0 and later), Nillable, Sort (unavailable in API version 25.0 and later), Update **Description** A comma-separated list of domains the deployment is whitelisted for. Leave this blank to allow the deployment to be used on any domain.
HasTranscriptSave	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether visitors can download and save transcripts from the chat window
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the deployment
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the deployment
MobileBrandingId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the static image resource displayed in the mobile version of the chat window
OptionsHasPrechatApi	**Type** boolean **Properties** Create, Filter, Update

Field Name	Details
	Description Determines whether developers can access the Pre-Chat API
`SiteId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the site used for loading static resources
`WindowTitle`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text displayed in the title bar of the browser window used to launch the chat window

Usage

Use this object to query and manage live chat deployments.

LiveChatSensitiveDataRule

Represents a rule for masking or deleting data of a specified pattern. Written as a regular expression (regex). This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActionType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklistSort, Update

Field Name	Details
	Description The action to take on the text (remove or replace) when the sensitive data rule is triggered.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the sensitive data rule—for example, "Block social security numbers."
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`EnforceOn`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Determines the roles on which the rule is enforced. The value is determined using bitwise OR operation. There are seven possible values: **1.** Rule enforced on Agent **2.** Rule enforced on Visitor **3.** Rule enforced on Agent and Visitor **4.** Rule enforced on Supervisor **5.** Rule enforced on Agent and Supervisor

Field Name	Details
	6. Rule enforced on Visitor and Supervisor 7. Rule enforced on Agent, Visitor, and Supervisor
`IsEnabled`	**Type** boolean **Properties** Create, Filter, Group, Sort, Update **Description** Specifies whether a sensitive data rule is active (`true`) or not (`false`). Default value (if none is provided) is `false`.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the sensitive data rule.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the sensitive data rule.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.

Field Name	Details
	• In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Pattern`	**Type** textarea **Properties** Create, Update **Description** The pattern of text blocked by the rule. Written as a JavaScript regular expression (regex).
`Replacement`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The string of characters that replaces the blocked text (if `ActionType` *`Replace`* is selected).

Usage

Use this object to mask or delete data of specified patterns, such as credit card, social security, phone and account numbers, or even profanity.

LiveChatTranscript

This object is automatically created for each Life Agent chat session and stores information about the session. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Abandoned`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The amount of time in seconds an incoming chat request remained unanswered by an agent before the chat was disconnected by the customer.
AccountId	**Type** ID **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with the chat transcript.
AverageResponseTimeOperator	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The agent's average response time (in seconds) to chat messages from the visitor.
AverageResponseTimeVisitor	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's average response time (in seconds) to chat messages from the agent.
Body	**Type** textarea **Properties** Create, Nillable, Update **Description** The contents of the chat.
Browser	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The browser the visitor used for the chat.

Field Name	Details
BrowserLanguage	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The language of the visitor’s browser.
CaseID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the case associated with the chat transcript.
ChatDuration	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total duration of the chat in seconds.
ChatKey	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort **Description** The session ID of the chat before it is persisted. `ChatKey` can be used with advanced integrations in the Salesforce console. This field is available in API version 25.0 and later.
ContactID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact associated with the chat transcript.
EndedBy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description The way the chat was ended: by the operator, the visitor, or the system.
`EndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time the chat ended.
`IpAddress`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The visitor's IP address.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LeadID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the lead associated with the chat transcript.

Field Name	Details
LiveChatButtonID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the LiveChatButton the chat session originated from.
LiveChatDeploymentID	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Type** The ID of the LiveChatDeployment the chat session originated from.
LiveChatVisitorID	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the visitor associated with the chat transcript.
Location	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The best-guess approximation of the visitor's location.
MaxResponseTimeOperator	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The maximum time in seconds it took an agent to respond to a chat visitor's message.
MaxResponseTimeVisitor	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The maximum time in seconds it took a customer to respond to an agent's message.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the transcript.
OperatorMessageCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of messages sent by agent(s) during the chat.
OwnerID	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the operator who participated in the chat last; for missed chats, this is a system user.
Platform	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's operating system platform.
ReferrerUri	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the chat request originated.
RequestTime	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable. Sort, Update **Description** The time the visitor requested the chat.
ScreenResolution	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's screen resolution.
SkillId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The record ID of the primary Skill associated with the LiveChatButton the chat session originated from. To associate multiple skills with a LiveChatTranscript, use LiveChatTranscriptSkill junction objects.
StartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time the chat started.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The final status of the chat: completed, missed, dropped or blocked.
SupervisorTranscriptBody	**Type** textarea **Properties** Create, Nillable, Update **Description** The text body of the supervisor's chat transcript.

Field Name	Details
UserAgent	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The visitor's user agent string.
VisitorMessageCount	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of messages sent by the visitor during the chat.
VisitorNetwork	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Decsription** The network or service provider the chat visitor used for the chat.
WaitTime	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total amount of time in seconds a chat request was waiting to be accepted by an agent.

Usage

Use this object to query and manage live chat transcripts.

LiveChatTranscriptEvent

Captures specific events that occur over the lifetime of a chat. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
AgentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the agent associated with the event.
Detail	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** Details associated with the event.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
LiveChatTranscriptId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the live chat transcript associated with the event.
Name	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the event.
`Time`	**Type** dateTime **Properties** Create, Filter, Sort **Description** The time at which the event happened.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The kind of event that occurred.

Usage

Use this object to query and manage live chat transcript events.

LiveChatTranscriptHistory

Represents changes to field values on a LiveChatTranscript object. This object is available in API version 24.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The name of the field that was changed
`LiveChatTranscriptID`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the transcript that was changed
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The old value of the field that was changed

Usage

Use this object to identify changes to a live chat transcript.

LiveChatTranscriptOwnerSharingRule

Represents the rules for sharing a Life Agent chat transcript record with users other than the record owner. This object is available in API version 29.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, restrictedPicklist, Sort, Update **Description** Determines the level of access users have to chat transcript records. Specifies whether or not users can read, edit, or transfer chat transcript records. Corresponds to the Default Access column in the UI.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to Rule Name in the UI. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Chat transcript records owned by users in the source group trigger the rule to give access.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, idLookup,Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to Label in the UI.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

Usage

Use this object to manage the sharing rules for Life Agent chat transcript records.

SEE ALSO:

Metadata API Developer Guide: SharingRules

LiveChatTranscriptShare

Represents a sharing entry on a LiveChatTranscript object. This object is available in API version 24.0 and later.

Supported Calls

`create(), delete(), query(), retrieve() update(), upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Level of access that the User or Group has to the LiveChatTranscript. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for live chat transcripts.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values may include: • `Manual`—The User or Group has access because a user with "All" access manually shared the LiveChatTranscript with them. • `Owner`—The User is the owner of the LiveChatTranscript or is in a role above the QuickText owner in the role hierarchy.
`UserOrGroupID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the LiveChatTranscript.

Usage

This object lets you determine which users and groups can view and edit LiveChatTranscript records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

LiveChatTranscriptSkill

Represents a join between LiveChatTranscript and Skill. This object is available in API version 25.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the transcript.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the skill.
`TranscriptId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the transcript.

Usage

Use this object to assign a specific skill to a specific transcript for multi-skill routing.

LiveChatUserConfig

Represents a setting that controls the console settings for Life Agent users. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AutoGreeting`	**Type** textarea **Properties** Create, Nillable, Update **Description** The text that is automatically sent from an agent to a visitor when a chat session starts.
`Capacity`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Limits the number of active chat session an agent can engage in.
`CriticalWaitTime`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The amount of time before a chat flashes to alert an agent to answer it.
`CustomAgentName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The custom name of the agent associated with the Life Agent configuration.
`DeveloperName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`HasLogoutSound`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether a sound plays when an agent logs out of the console.
`HasNotifications`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether desktop notifications are enabled for the configuration. Available in API version 25.0 and later.
`HasRequestSound`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether a sound plays when a chat request comes in.
`HasSneakPeek`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Determines whether an agent sees a real-time preview of the messages a visitor types.
`IsAutoAwayOnDecline`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Determines whether agents' status is automatically changed to Away when they decline a chat request. Available in API version 26.0 and later.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the configuration.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the configuration.
`OptionsHasAgentFileTransfer`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether agents can initiate a file transfer from a chat customer. Available in API version 31.0 and later.
`OptionsHasAgentSneakPeek`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether Sneak Peek is enabled for agents. Available in API version 29.0 and later.

Field Name	Details
OptionsHasAssistanceFlag	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether assistance flags are enabled for agents. Available in API version 29.0 and later.
OptionsHasChatConferencing	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether agents can invite other agents into a customer chat. Available in API version 34.0 and later.
OptionsHasChatMonitoring	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether supervisors can view agents' ongoing chats. Available in API version 29.0 and later.
OptionsHasChatTransferToAgent	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether an agent can transfer a chat directly to another agent. Available in API version 36.0 and later.
OptionsHasChatTransferToButton	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies whether an agent can transfer a chat to an agent assigned to a particular chat button. Available in API version 36.0 and later.
OptionsHasChatTransferToSkill	**Type** boolean

Field Name	Details
	Properties Create, Filter, Update **Description** Specifies whether an agent can transfer a chat to agents assigned to a particular skill. Available in API version 36.0 and later.
`OptionsHasVisitorBlocking`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether an agent has the ability to block troublesome visitors by IP address. Available in API version 34.0 and later.
`OptionsHasWhisperMessage`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether supervisors can send private messages to agents within an agent's chat with a customer. Available in API version 29.0 and later.
`OptionsIsAutoAwayOnPushTimeout`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether an agent's status automatically changes to Away if the agent doesn't respond to a chat request within the specified push time-out limit. Available in API version 34.0 and later.
`SupervisorDefaultAgentStatus`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default agent status by which to filter agents in the Agent Status list in the supervisor panel.
`SupervisorDefaultButtonId`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default button ID by which to filter agents in the Agent Status list in the supervisor panel.
`SupervisorDefaultSkillId`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The default skill ID by which to filter agents in the Agent Status list in the supervisor panel.

Usage

Use this object to query and manage agent configurations in Life Agent.

LiveChatUserConfigProfile

Represents a join between LiveChatUserConfig and Profile. This object is available in API version 24.0 and later.

Supported Calls

`create()` `delete()` `query()` `retrieve()` `update()` `upsert()`

Fields

Field Name	Details
`LiveChatUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the agent configuration
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The record ID of the profile

Usage

Use this object to assign specific agent configurations to specific user profiles.

LiveChatUserConfigUser

Represents a join between LiveChatUserConfig and User. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`LiveChatUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record ID of the agent configuration
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The record ID of the user

Usage

Use this object to assign specific agent configurations to specific users.

LiveChatVisitor

Represents a website visitor who has started or tried to start a chat session. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the visitor
`SessionKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The session key used to uniquely identify the visitor

Usage

Use this object to query and manage live chat visitors.

Location

Represents a warehouse, service vehicle, work site, or other element of the region where your team performs field service work.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`CloseDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date the location closed or went out of service.
`ConstructionEndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date construction ended at the location.
`ConstructionStartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date construction began at the location.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A brief description of the location.
`DrivingDirections`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Directions to the location.
`IsInventoryLocation`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location stores parts. Note: This field must be selected if you want to associate the location with product items.
`IsMobile`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the location moves. For example, a truck or tool box.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the location was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the location was last viewed.

Field Name	Details
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the location.
Location	**Type** location **Properties** Nillable **Description** The geographic location.
LocationLevel	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The location's position in a location hierarchy. If the location has no parent or child locations, its level is 1. Locations that belong to a hierarchy have a level of 1 for the root location, 2 for the child locations of the root location, 3 for their children, and so forth.
LocationType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Picklist of location types. The values are: • Warehouse (default) • Site • Van • Plant
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the location.

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the location. For example, Service Van #4.
OpenDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date the location opened or came into service.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The location's owner or driver.
ParentLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location's parent location. For example, if vans are stored at a warehouse when not in service, the warehouse is the parent location.
PossessionDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the location was purchased.
RemodelEndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Date remodel construction ended at the location.
`RemodelStartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date remodel construction ended at the location.
`RootLocationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The top-level location in the location's hierarchy.
`TimeZone`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Picklist of available time zones.
`VisitorAddressId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup to an account's or client's address.

Usage

To track your inventory in Salesforce, create product items, which represent the stock of a particular product a particular location. For example, create a product item that represents the 500 bolts you have in stock at your Warehouse A location. Each product item must be associated with a location.

To get a more granular picture of your field service operation, associate locations with service territories. For example, if a warehouse is located in a particular service territory, add it as a service territory location.

Important: "Location" in Salesforce can also refer to the geolocation compound field found on many standard objects. When referencing the Location object in your Apex code, always use `Schema.Location` instead of `Location` to prevent confusion with the standard Location compound field. If referencing both the Location object and the Location field in the same snippet, you can differentiate between the two by using `System.Location` for the field and `Schema.Location` for the object.

LocationFeed

Represents a single feed item on a field service location record detail page.

A location feed shows changes to tracked fields on a location record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to locations in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Location object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the location record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

LoginEvent

Represents a trackable user login event in your org. In the Real-Time Events pilot, only UI logins with username and password are captured. This object is available in API version 36.0 and later.

Supported Calls

describeSObjects(), `query()`

Special Access Rules

Accessing this object requires View Login Forensics Events and API Enabled user permissions.

Fields

Field	Details
`AdditionalInfo`	**Type** string **Properties** Nillable

Field	Details
	Description JSON serialization of additional information that's captured from the `HTTP` headers during a login request. For example, `{"field1": "value1","field2": "value2"}`. See Working with `AdditionalInfo` on page 1437.
`ApiType`	**Type** string **Properties** Nillable **Description** English-only. The type of API that's used to log in. Values include: • `XML-RPC` • `OSOAP` • `SOAP Enterprise` • `SOAP Partner` • `SOAP Internal/CrossInstance` • `REST API` • `Metadata API` • `N/A`
`ApiVersion`	**Type** string **Properties** Nillable **Description** English-only. The version number of the API. If no version number is available, "Unknown" is returned.
`Application`	**Type** string **Properties** Nillable **Description** The application name in English. For example, Salesforce Internal Application or Microsoft SOAP Toolkit.
`AuthServiceId`	**Type** reference **Properties** Nillable

Field	Details
	Description Refers to the `AuthenticationServiceId` field on the LoginHistory object. For example, you can use this field to identify the SAML or authentication provider configuration with which the user logged in.
`Browser`	**Type** string **Properties** Nillable **Description** The browser name and version if known. If no browser or version number is available, "Unknown" is returned. Product names are in English.
`CipherSuite`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The TLS cipher suite used for the login. Values are OpenSSL-style cipher suite names, with hyphen delimiters, for example, `AES128-GCM-SHA256`. Available in API version 37.0 and later. Valid values are: • AES128-GCM-SHA256 • AES128-SHA • AES128-SHA256 • AES256-GCM-SHA384 • AES256-SHA • AES256-SHA256 • DES-CBC3-SHA • DHE-RSA-AES128-GCM-SHA256 • DHE-RSA-AES128-SHA • DHE-RSA-AES256-GCM-SHA384 • DHE-RSA-AES256-SHA • DHE-RSA-DES-CBC3-SHA • ECDH-ECDSA-AES128-GCM-SHA256 • ECDH-ECDSA-AES128-SHA256 • ECDH-ECDSA-AES256-GCM-SHA384 • ECDH-ECDSA-AES256-SHA384 • ECDH-RSA-AES128-GCM-SHA256 • ECDH-RSA-AES128-SHA256 • ECDH-RSA-AES256-GCM-SHA384

Field	Details
	• ECDH-RSA-AES256-SHA384 • ECDHE-ECDSA-AES128-GCM-SHA256 • ECDHE-ECDSA-AES128-SHA256 • ECDHE-ECDSA-AES256-GCM-SHA384 • ECDHE-ECDSA-AES256-SHA384 • ECDHE-RSA-AES128-CBC-SHA • ECDHE-RSA-AES128-GCM-SHA256 • ECDHE-RSA-AES128-SHA256 • ECDHE-RSA-AES256-CBC-SHA • ECDHE-RSA-AES256-GCM-SHA384 • ECDHE-RSA-AES256-SHA384 • ECDHE-RSA-DES-CBC3-SHA • Unknown
`ClientVersion`	**Type** string **Properties** Nillable **Description** English-only. The version number of the login client. If no version number is available, "Unknown" is returned.
`EvaluationTime`	**Type** double **Properties** Nillable, **Description** The amount of time it took to evaluate the policy in milliseconds. This field is available in API version 42.0 and later.
`EventDate`	**Type** dateTime **Properties** Filter, Sort **Description** The login time of the specified event. For example, 2013-01-01T03:01:01Z. Seconds are the most granular setting.
`EventIdentifier`	**Type** string

Field	Details
	Properties Filter, Sort **Description** The unique identifier for each record in LoginEvent. Available in API version 42.0 and later. Use this field as the primary key in your queries instead of the `UniqueKey` field (deprecated in API version 42.0) or the `Id` system field (not populated in API version 40.0 and later).
`LoginGeoId`	**Type** reference **Properties** Nillable **Description** The Salesforce ID of the LoginGeo object associated with the login user's IP address.
`LoginHistoryId`	**Type** reference **Properties** Nillable **Description** Tracks a user session so you can correlate user activity with a particular login instance.
`LoginKey`	**Type** string **Properties** Nillable **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring. This field is available in API version 42.0 and later.
`LoginType`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The event's type of login. For example, "Application."
`LoginUrl`	**Type** string **Properties** Nillable

Field	Details
	Description The URL of the login host. For example, ***`yourInstance`***`.salesforce.com`.
`Platform`	**Type** string **Properties** Nillable **Description** The platform name and version that are used during the login event. If no platform name is available, "Unknown" is returned. Platform names are in English.
`PolicyId`	**Type** reference **Properties** Nillable **Description** The ID of the transaction policy associated with this event. This field is available in API version 42.0 and later.
`PolicyOutcome`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The result of the transaction policy. Possible values are: • Block - The user was blocked from performing the operation that triggered the policy. • EndSession - The Concurrent Sessions Limiting policy activated, limiting the number of concurrent sessions per user. • Error - The policy caused an undefined error when it executed. • FreezeUser - The user was prevented from taking any further action. • NoAction - The policy didn't trigger. • Notified - A notification was sent to the recipient. • TwoFAAutomatedSuccess - Salesforce Authenticator approved the request for access because the request came from a trusted location. After users enable location services in Salesforce Authenticator, they can designate trusted locations. When a user trusts a location for a particular activity, such as logging in from a recognized device, that activity is approved from the trusted location for as long as the location is trusted. • TwoFADenied - The user denied the approval request in the authenticator app, such as Salesforce Authenticator. • TwoFAFailedGeneralError - An error caused by something other than an invalid verification code, too many verification attempts, or authenticator app connectivity. • TwoFAFailedInvalidCode - The user provided an invalid verification code.

Field	Details
	• TwoFAFailedTooManyAttempts - The user attempted to verify identity too many times. For example, the user entered an invalid verification code repeatedly. • TwoFAInitiated - Salesforce initiated identity verification but hasn't yet challenged the user. • TwoFAInProgress - Salesforce challenged the user to verify identity and is waiting for the user to respond or for Salesforce Authenticator to send an automated response. • TwoFANoAction - [??? Not in VerificationHistory] • TwoFARecoverableError - Salesforce can't reach the authenticator app to verify identity, but will retry. • TwoFAReportedDenied - The user denied the approval request in the authenticator app, such as Salesforce Authenticator, and also flagged the approval request to report to an administrator. • TwoFASucceeded - The user's identity was verified. This field is available in API version 42.0 and later.
`SessionKey`	**Type** string **Properties** Nillable **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started. For LoginEvent, this field is usually null because the event is captured before a session is created. This field is available in API version 42.0 and later.
`SessionLevel`	**Type** picklist **Properties** Nillable, Restricted picklist **Description** Session-level security controls user access to features that support it, such as connected apps and reporting. Possible values are: • HIGH_ASSURANCE - A high assurance session was used for resource access. For example, when the user tries to access a resource such as a connected app, report, or dashboard that requires a high-assurance session level. • LOW - The user's security level for the current session meets the lowest requirements. Note: This low level is not available, nor used, in the Salesforce UI. User sessions through the UI are either standard or high assurance. You can set this level using the API, but users assigned this level will experience unpredictable and reduced functionality in their Salesforce org. • STANDARD - The user's security level for the current session meets the Standard requirements set in the current organization Session Security Levels. This field is available in API version 42.0 and later.

Field	Details
SourceIp	**Type** string **Properties** Nillable **Description** The source IP address of the client logging in. For example, `126.7.4.2`.
Status	**Type** string **Properties** Nillable **Description** The login status is in English. "Success" is returned when successful. Otherwise, an error message is returned.
TlsProtocol	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The TLS protocol version used for the login. Available in API version 37.0 and later. Valid values are: • TLS 1.0 • TLS 1.1 • TLS 1.2 • Unknown
UserId	**Type** reference **Properties** Nillable **Description** The user's unique ID. For example, `005000000000123`.
Username	**Type** string **Properties** Nillable **Description** The username in the format of `user@company.com`.

Field	Details
UserType	**Type** picklist **Properties** Nillable, Restricted picklist **Description** The category of user license. Each `UserType` is associated with one or more UserLicense records. Each UserLicense is associated with one or more profiles. Valid values are: • CsnOnly—Users whose access to the application is limited to Chatter. This user type includes Chatter Free and Chatter moderator users. • CspLitePortal—CSP Lite Portal license. Users whose access is limited because they are organization customers and access the application through a customer portal or community. • CustomerSuccess—Customer Success license. Users whose access is limited because they are organization customers and access the application through a customer portal. • Guest • PowerCustomerSuccess—Power Customer Success license. Users whose access is limited because they are organization customers and access the application through a customer portal. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the customer portal role hierarchy. • PowerPartner—Power Partner license. Users whose access is limited because they are partners and typically access the application through a partner portal or community. • SelfService • Standard—Standard user license. This user type also includes Salesforce Platform and Salesforce Platform One user licenses. This field is available in API version 42.0 and later.

Working with `AdditionalInfo`

`AdditionalInfo` enables you to extend the login event with custom data that can be queried later. For example, you can capture a correlation ID when a user logs in from an external system that shares that unique ID. This process enables tracking logins across systems. To store data with LoginEvent, begin all `AdditionalInfo` field names with `x-sfdc-addinfo-{`***`fieldname`***`}`. For example, a valid field assignment is `x-sfdc-addinfo-correlation_id = ABC123` where `x-sfdc-addinfo-correlation_id` is the field name and `ABC123` is the field value.

When defining field names, note the following:

- `x-sfdc-addinfo-` is case-*insensitive*. `x-sfdc-addinfo-{`***`field name`***`}` is the same as `X-SFDC-ADDINFO-{`***`FIELD NAME`***`}`.
- Fields can contain only alphanumeric and "_" (underscore) characters.
- Field names must be between 2 and 29 characters in length, excluding `x-sfdc-addinfo-`.
- Field names that don't start with `x-sfdc-addinfo-` are ignored.
- Names that contain invalid characters after `x-sfdc-addinfo-` are ignored.
- Only the first 30 valid field names are stored in `AdditionalInfo`. Field names are not necessarily stored in the same order in which they were passed to authentication.

When determining field values, keep the following in mind:

- You can't use existing API field names as `AdditionalInfo` names in the HTTP header. If the `AdditionalInfo` name conflicts with an object's API name, the field value isn't stored. For example, the HTTP header `X-SFDC-ADDINFO-UserId='abc123'` doesn't get stored in `AdditionalInfo`.
- Additional field values can contain only alphanumeric, "_," and "-" characters.
- Field values must be 255 characters in length or fewer. If a field value exceeds 255 characters, only the first 255 characters are stored and the rest are truncated.
- Field values that contain invalid characters are saved with a field header of Empty String ("").
- Only the first 30 valid field names are stored in the `AdditionalInfo` field. They are not guaranteed to be stored in the same order that they were passed into the authentication.
- When `AggregationFieldName` is `SourceIp`, you can't filter on `AggregationFieldValue` if its value is *`Salesforce.com IP`*.

How to Pass Additional Information by Using HTTP with cURL

Here's an example of passing additional information via the command line.

```
curl https://yourInstance.salesforce.com/services/oauth2/token -d "grant_type=password"
-d
"client_id=3MVG9PhR6g6B7ps4RF_kNPoWSxVQstrazijsE8njPtkpUzVPPffzy8
jIoRE6q9rPznNtlsqbP9ob8kUfMjXXX" -d "client_secret=4180313776440635XXX" -d
"username=user@company.com" -d "password=123456" -H "X-PrettyPrint:1" -H
"x-sfdc-addinfo-correlationid:
d18c5a3f-4fba-47bd-bbf8-6bb9a1786624"
```

How to Pass Additional Information in Java

Here's an example of passing additional information in Java.

```
//adding additional info headers ..
Map<String, String> httpHeaders = new HashMap<String,String>();
httpHeaders.put("x-sfdc-addinfo-fieldname1" /* additional info field*/ ,
"d18c5a3f-4fba-47bd-bbf8-6bb9a1786624" /* value*/);
httpHeaders.put("x-sfdc-addinfo-fieldname2" /* additional info field*/ ,
"d18c5a3f-4fba-47bd-bbf8-6bb9a1786624" /* value*/);
ConnectorConfig config = new ConnectorConfig();
config.setUsername(userId);
config.setPassword(passwd);
config.setAuthEndpoint(authEndPoint);
config.setProxy(proxyHost, proxyPort);
//setting additional info headers
for (Map.Entry<String, String> entry : httpHeaders.entrySet()) {
config.setRequestHeader(entry.getKey(), entry.getValue());
}
// Set the username and password if your proxy must be authenticated
9
LoginEvent
config.setProxyUsername(proxyUsername);
config.setProxyPassword(proxyPassword);
try {
```

```
EnterpriseConnection connection = new EnterpriseConnection(config);
// etc.
} catch (ConnectionException ce) {
ce.printStackTrace();
}
```

Standard SOQL Usage

Currently, the only supported SOQL function on LoginEvent is `WHERE`, and you can only use comparison operators (=, <, >, <=, and >=) on the final expression in a `WHERE` clause. The != operator isn't supported.

Note: Date functions such as `convertTimezone()` aren't supported. For example, `SELECT CALENDAR_YEAR(EventDate), Count(EventIdentifier) FROM LoginEvent GROUP BY CALENDAR_YEAR(EventDate)` returns an error. You can use date literals in your queries and some date and date/time functions like `TODAY`, `YESTERDAY`, and `LAST_n_DAYS:1`. However, these functions use comparison operators behind the scenes. This means you can only use them in the final expression of a `WHERE` clause.

LoginEvent allows filtering over two ordered fields: `EventDate` and `EventIdentifier`. There's a catch here; your query won't work unless you use the correct order and combination of these fields. The following list provides some examples of valid and invalid queries:

- **Unfiltered**
  - **Valid**—Contains no `WHERE` clause, so no special rules apply.

    ```
    SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
    FROM LoginEvent
    ```

- **Filtered on** `EventDate`
  - **Valid**—You can filter solely on `EventDate`, but single filters on other fields fail. You can also use a comparison operator in this query type.

    ```
    SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
    FROM LoginEvent
    WHERE EventDate<=2014-11-27T14:54:16.000Z
    ```

  - **Valid**—You can filter on `EventDate` using date literals.

    ```
    SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
    FROM LoginEvent
    WHERE EventDate<=TODAY
    ```

- **Filtered on** `EventDate` **and** `EventIdentifier`
  - **Valid**—Successful queries on LoginEvent filter over both fields.

    ```
    SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
    FROM LoginEvent
    WHERE EventDate=2014-11-27T14:54:16.000Z and
    EventIdentifier='f0b28782-1ec2-424c-8d37-8f783e0a3754'
    ```

- **Invalid**—Queries on LoginEvent with `EventDate` and standard date literals.

```
SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
FROM LoginEvent
WHERE EventDate=TODAY and EventIdentifier='f0b28782-1ec2-424c-8d37-8f783e0a3754'
```

- **Invalid**—Filtering only on `EventDate` with <= or >= operator and `EventIdentifier` field isn't supported.

```
SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId
FROM LoginEvent
WHERE EventDate<=2014-11-27T14:54:16.000Z and
EventIdentifier='f0b28782-1ec2-424c-8d37-8f783e0a3754'
```

Async SOQL Usage

With Async SOQL, you can filter on any field in LoginEvent and use any comparison operator in your query.

Example: Get Yesterday's Successful Logins

```
SELECT Application, Browser, EventDate, EventIdentifier, LoginUrl, UserId FROM LoginEvent
WHERE EventDate<Yesterday AND Status='Success'
```

SEE ALSO:

Async SOQL Guide (Pilot)

LoginGeo

Represents the geographic location of the user's IP address for a login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) may vary. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with Manage Users permissions can access this object.

Fields

Field	Details
`City`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The city where the user's IP address is physically located. This value is not localized.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country where the user's IP address is physically located. This value is not localized.
CountryIso	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO 3166 code for the country where the user's IP address is physically located. For more information, see Country Codes - ISO 3166
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The latitude where the user's IP address is physically located.
LoginTime	**Type** dateTime **Properties** Filter, Sort **Description** Time of the login attempt, in GMT time zone.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The longitude where the user's IP address is physically located.
PostalCode	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The postal code where the user's IP address is physically located. This value is not localized.
`Subdivision`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the subdivision where the user's IP address is physically located. In the U.S., this value is usually the state name (for example, Pennsylvania). This value is not localized.

Usage

The API allows you to do many powerful queries. A few examples are:

Sample Query	Query String
Query showing the country for a login event, where `Id=LoginGeoId` from AuthSession	`SELECT Country FROM LoginGeo WHERE Id = '0LE###############'`
Query showing the city and postal code for a login event, where `Id=LoginGeoId` from LoginHistory	`SELECT City, PostalCode FROM LoginGeo WHERE Id = '0SO###############'`

LoginHistory

Represents the login history for all successful and failed login attempts for organizations and enabled portals. This object is available in API version 21.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

With one exception, only users with Manage Users permissions can access this object. The exception is that, in API version 37.0 and later, all users can retrieve their own login history records.

Fields

Field	Details
`ApiType`	**Type** string **Properties** Group, Nillable, Sort **Description** Indicates the API type, for example `Soap Enterprise`. Label is **API Type**.
`APIVersion`	**Type** string **Properties** Group, Nillable, Sort **Description** Displays the API version used by the client. Label is **API Version**.
`Application`	**Type** string **Properties** Group, Nillable, Sort **Description** The application used to access the organization. Label is **Application**.
`AuthenticationServiceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for an authentication service for a login event. For example, you can use this field to identify the SAML or authentication provider configuration with which the user logged in. This field is available in API version 34.0 and later. Label is **Authentication Service Id**.
`Browser`	**Type** string **Properties** Group, Nillable, Sort **Description** The current browser version. Label is **Browser**.
`ClientVersion`	**Type** string

Field	Details
	Properties Group, Nillable, Sort **Description** Version of the API client. Label is **Client Version**.
`CipherSuite`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The TLS cipher suite used for the login. Values are OpenSSL-style cipher suite names, with hyphen delimiters. For more information, see OpenSSL Cryptography and SSL/TLS Toolkit. This field is available in API version 37.0 and later.
`CountryIso`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO 3166 code for the country where the user's IP address is physically located. For more information, see Country Codes - ISO 3166. This field is available in API version 37.0 and later.
`LoginGeoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a successful or unsuccessful login event. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) can vary. This field is available in API version 34.0 and later.
`LoginTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Time zone is based on GMT. Label is **Login Time**.
`LoginType`	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The type of login, for example, Application, OAuth, or SAML. Label is **Login Type**.
`LoginUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL from which the login request is coming. Label is **Login URL**.
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the community that the user is logging in to. This field is available in API version 31.0 and later, if Salesforce Communities is enabled for your organization.
`Platform`	**Type** string **Properties** Group, Nillable, Sort **Description** Operating system on the login machine. Label is **Platform**.
`SourceIp`	**Type** string **Properties** Group, Nillable, Sort **Description** IP address of the machine from which the login request is coming. The address can be an IPv4 or IPv6 address in API version 23.0 or later. In API version 22.0 or earlier, the address is an IPv4 address, and IPv6 addresses are null. Label is **Source IP**.
`Status`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description Displays the status of the attempted login. Status is either success or a reason for failure. Label is **Status**.
`TlsProtocol`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The TLS protocol used for the login. Possible values are: • `TLS 1.0` • `TLS 1.1` • `TLS 1.2` • `Unknown` This field is available in API version 37.0 and later.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user logging in. Label is **User ID**.

Usage

Not all fields are filterable. You can only filter on the following fields:

- `AuthenticationServiceId`
- `CipherSuite`
- `CountryIso`
- `Id`
- `LoginTime`
- `LoginType`
- `LoginUrl`
- `NetworkId`
- `TlsProtocol`
- `UserId`

The API allows you to do many powerful queries. A few examples are:

Sample Query	Query String
Simple query showing UserId & LoginTime for each user	`SELECT UserId, LoginTime from LoginHistory;`
Query showing logins only after a specified date and time	`SELECT UserId, LoginTime from LoginHistory WHERE LoginTime > 2010-09-20T22:16:30.000Z;`
Query showing logins for a specific time interval	`SELECT UserId, LoginTime from LoginHistory WHERE LoginTime > 2010-09-20T22:16:30.000Z AND LoginTime < 2010-09-21T22:16:30.000Z;`
Query showing the authentication service for a SAML login event, where `Id=AuthenticationServiceId` from LoginHistory	`SELECT name, issuer, samlVersion FROM SamlSsoConfig WHERE Id = '0LE###############'`
Query showing the authentication service for an authentication provider login event, where `Id=AuthenticationServiceId` from LoginHistory	`SELECT Type, DeveloperName FROM AuthProvider WHERE Id = '0SO###############'`

LoginIp

Represents a validated IP address. This object is available in version 28.0 and later.

Supported Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`

Fields

Field	Details
`ChallengeMethod`	**Type** picklist **Properties** Filter, Nillable, Sort **Description** The challenge method used to confirm the user's identity. Possible values include the following. • `Email` • `SMS` • `TOTP_CHOICE`: The user chooses two-factor authentication. • `TOTP_ONLY`: The user is required to use two-factor authentication.
`ChallengeSentDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The date and time that the user was authenticated.
`IsAuthenticated`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has already been authenticated.
`SourceIp`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The IP address the user logged in from.
`UsersId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user associated with this item.

Usage

At every login, the IP address of the login request is checked against the validated IP addresses using LoginIp. A match means the login IP address is a known IP address. If there's no match, the address is unknown, and the user is asked to confirm their identity.

LogoutEventStream (Beta)

LogoutEventStream represents an event associated with a user UI logout. A logout event records a successful user logout from your org's UI. This object is read only, and you can't retrieve it using a SOQL query. This object is available in API version 41.0 and later.

Note: As a beta feature, the LogoutEventStream object is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for the LogoutEventStream object in the Salesforce Identity group in the Trailblazer Community. For information on enabling this feature in your org, contact Salesforce.

When LogoutEventStream is enabled, Salesforce publishes logout events, and you can add an Apex trigger to subscribe to those events. You can then implement custom logic during logout. For example, you can revoke all refresh tokens for a user at logout.

Note: LogoutEventStream records logouts, not timeouts. Timeouts don't cause a LogoutEventStream object to be published. An exception is when a user is automatically logged out of the org after their session times out because the org has the **Force logout on session timeout** setting enabled. In this case, a logout event is recorded. However, if users close their browser during a session, regardless of whether the **Force logout on session timeout** setting is enabled, a logout event isn't recorded.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`EventDate`	**Type** datetime **Properties** Filter, Nillable, Sort **Description** Represents when the event started.
`EventIdentifier`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the event ID for correlation purposes.
`LoginKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring.
`RelatedEventIdentifier`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Represents the EventIdentifier of the related event.
`ReplayId`	**Type** string **Properties** Filter, Nillable, Sort **Description** Represents the Numeric ID that identifies the logout event. Each ID is incremented automatically and guaranteed to be higher than the ID of the previous event, but not necessarily contiguous for consecutive events.
`SessionKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user's unique session ID. You can use this value to identify all user events within a session. When a user logs out and logs in again, a new session is started.
`SessionLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the session-level security of the session that the user is logging out of for this event. Session-level security controls user access to features that support it, such as connected apps and reporting. Possible values are: • LOW - The user's security level for the current session meets the lowest requirements. Note: This low level is not available, nor used, in the Salesforce UI. User sessions through the UI are either standard or high assurance. You can set this level using the API, but users assigned this level will experience unpredictable and reduced functionality in their Salesforce org. • STANDARD - The user's security level for the current session meets the Standard requirements set in the current organization Session Security Levels. • HIGH_ASSURANCE - A high assurance session was used for the current session. For example, when the user tries to access a resource such as a connected app, report, or dashboard that requires a high assurance session level. This field is available in API version 43.0 and later.

Field Name	Details
SourceIp	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The source IP address of the client logging out. For example, `126.7.4.2`. This field is available in API version 43.0 and later.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of the user associated with the logout event.
Username	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the username of the user associated with the logout event.

Usage

In this example, the subscriber inserts a custom logout event record during logout.

```
trigger LogoutEventTrigger on LogoutEventStream (after insert) {
  LogoutEventStream event = Trigger.new[0];
  LogoutEvent__c record = new LogoutEvent__c();
  record.EventIdentifier__c = event.EventIdentifier;
  record.UserId__c = event.UserId;
  record.Username__c = event.Username;
  record.EventDate__c = event.EventDate;
  record.RelatedEventIdentifier__c = event.RelatedEventIdentifier;
  record.SessionKey__c = event.SessionKey;
  record.LoginKey__c = event.LoginKey;
  insert(record);
}
```

LookedUpFromActivity

This read-only object is displayed as a related list on an activity record (an event or a task); the list contains records that have custom lookup relationships from the activity to another object. This object is not queryable.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see Field Types
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates one of the following: • The due date of a task • The date of an event if `IsAllDayEvent` is set to `true` This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.
`ActivitySubtype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email

Field Name	Details
	• Call • Event • List Email
`ActivityType`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Meeting`, or `Other`. Label is `Type`.
`CallDisposition`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the result of a given call; for example, "we'll call back," or "call unsuccessful." Limit is 255 characters.
`CallDurationInSeconds`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
`CallObject`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of a call center. Limit is 255 characters.
`CallType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.

Field Name	Details
`Description`	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
`DurationInMinutes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.
`EndDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time.
`IsAllDayEvent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is an event spanning a full day, and the `ActivityDate` defines the date of the event. If the value of this field is set to `false`, then the activity may be an event spanning less than a full day, or it may be a task. Label is `All-Day Event`.
`IsClosed`	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always `false`. This field is set indirectly by setting `Status` on the task—each picklist value has a corresponding `IsClosed` value. Label is `Closed`.
`IsHighPriority`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
`IsReminderSet`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
`IsTask`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task; if the value is set to `false`, then the activity is an event. Label is `Task`.
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
`Location`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description If the activity is an event, then this field represents the location of the event. If the activity is a task, then the value is `null`.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user who owns the activity.
`Priority`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the priority of a task, such as high, normal, or low.
`ReminderDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the time at which a reminder is scheduled to fire if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then either the user has deselected the reminder checkbox in the user interface or the reminder has already fired at the time indicated by the value.
`StartDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates the start date and time of the event. Available in versions 13.0 and later. The `StartDateTime` field contains the event start date. However, if the event's `IsAllDayEvent` flag is set to `true` (indicating an all-day event), then the time stamp in the `StartDateTime` field is always set to midnight in the Coordinated Universal Time (UTC) time zone. Don't attempt to alter the time stamp to account for any time zone differences. If the event's `IsAllDayEvent` flag is set to `false`, then you must translate the time portion of the time stamp in the `StartDateTime` field to or from a

Field Name	Details
	local time zone for the user or the application, as appropriate, and the translation must be in the Coordinated Universal Time (UTC) time zone. If this field has a value, then `ActivityDate` and `ActivityDateTime` either must be `null` or must match the value of this field.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for `IsClosed`.
`Subject`	**Type** combobox **Properties** Filter, Nillable, Sort **Description** Contains the subject of the task or event.
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`.

Usage

Query activities related to an object

1. Optionally, issue a describe call against the object whose activities you wish to query, to get a suggestion of the correct SOQL to use.
2. Issue a SOQL relationship query with a main clause that references the object, and an inner clause that references the activity custom lookup relationship; for example:

```
SELECT id, name,
(SELECT id, subject from sponsoredact__r)
FROM Contact
```

In this example *sponsoredact__r* is a user defined relationship list.

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following restrictions on users who don't have "View All Data" permission help prevent performance issues:

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with 'A'; instead, you must reference a single account record.
- In the inner clause of the query, you can't use `WHERE`.
- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- You must sort on `ActivityDate` in descending order and `LastModifiedDate` in descending order; you can display nulls last. For example: `ORDER BY ActivityDate DESC NULLS LAST, LastModifiedDate DESC`.

Macro

Represents a macro, which is a set of instructions that tells the system to perform one or more tasks. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of what this macro does.

Field	Details
IsAlohaSupported	**Type** boolean **Properties** Defaulted on create, Filter **Description** Specifies whether the macro is supported in Salesforce Classic.
IsLightningSupported	**Type** boolean **Properties** Defaulted on create, Filter **Description** Specifies whether the macro is supported in Lightning Experience.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the macro record was last referenced.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the macro record was last viewed.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the macro.
OwnerId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the owner of the session record.

Field	Details
`StartingContext`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The object the macro performs actions on. In Salesforce Classic, macros are supported on objects with both feed-based layouts and quick actions. In Lightning Experience, macros are supported on standard and custom objects that allow quick actions and have a customizable page layout.

Usage

A macro definition consists of a Macro object and several associated MacroInstruction objects.

First, create a Macro object. Then, create MacroInstruction objects.

A macro contains an ordered list of macro instructions whose index field, `sortOrder`, is 0-based. If there's an incorrect sequence of macro instructions, the macro doesn't execute.

If you update a macro definition or add or remove instructions from a macro, delete the existing macro instructions and re-create instructions. Make sure that the `sortOrder` field that defines the execution order is correct. To delete an entire macro definition, invoke the delete operation on the Macro object.

The table describes the supported macro instruction targets and how they relate to each other.

Note: Strings indicated by `<brackets>` are variables. The variable description describes the required type. For example, `Tab.<EntityApiName` requires the entity name. If your custom entity name is `MyCustomObject`, your target API is `Tab.MyCustomObject__c`.

If a macro instruction listed in the table supports an implicit operation, you can use that operation as a direct child instruction without explicitly specifying a target. The hyphens used in the table illustrate the hierarchical relationship between targets. A target isn't available if its parent isn't.

Table 1: Macro Instruction Target Grammar and Hierarchy

Target API Name	Supported Operations
`Tab.<EntityApiName>`	SELECT, CLOSE (implicit)
`- QuickAction.<EntityApiName>.<QuickActionName>`	SELECT, SUBMIT (implicit)
`- - Field.<QATargetEntityApiName>.<FieldApiName>`	SET
`- - Field.<QATargetEntityApiName>.<MultilineTextFieldApiName>.cursor`	INSERT
`- - Field.<QATargetEntityApiName>.<SinglelineTextFieldApiName>.end`	INSERT
`- QuickAction.Case.Email`	SELECT, SUBMIT (implicit)
`- - Field.EmailMessage.<FieldApiName>`	SET

Target API Name	Supported Operations
`- - Field.EmailMessage.<MultilineTextFieldApiName>.cursor`	INSERT
`- - Field.EmailMessage.<SinglelineTextFieldApiName>.end`	INSERT
`- - Field.EmailTemplate`	SET
`- SidebarCmp.Knowledge`	SELECT
`- - SearchAction.KnowledgeArticle`	SELECT
`- - - Field.SearchString`	SET, INSERT
`- - - Command.Search`	SUBMIT
`- - SearchResult.KnowledgeArticle.MostRecentItem`	SELECT
`- - - Command.AttachToRecord`	SUBMIT
`- - - Command.InsertToEmail`	SUBMIT
`- - - Command.AttachToEmailAsPDF`	SUBMIT

Example: This example describes a macro that opens a quick action, sets some fields in the quick action, and submits the quick action.

```
0. SELECT Tab.Case
1.   SELECT QuickAction.Case.Email
2.     SET Field.EmailMessage.Subject
3.     SET Field.EmailMessage.ToAddress
4.     INSERT Field.EmailMessage.HtmlBody.cursor
5.     SUBMIT
```

MacroInstruction

Represents an instruction in a macro. An instruction can specify the object that the macro interacts with, the context or publisher that the macro works within, the operation or action that the macro performs, and the target of the macro's actions. It is a useful way to programmatically define instructions, instead of using the macro widget in the console.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`MacroId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the macro that contains this instruction.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Name of the instruction.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The action that the macro instruction performs.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Order of this instruction in the macro.
`Target`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Object in the case feed that is the target of the operation. For example, the target might be the active case tab or a quick action.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Value of a field. If the operation is Select, then the value is null, because the operation selects the object on which the macro performs an action. An

Field Name	Details
	instruction can contain both a `Value` field and a `ValueRecord` field, but only one of these fields can have a value. The other field value must be null.
`ValueRecord`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the value or record. The `ValueRecord` can be either a value or a record, but not both. An instruction can contain both a `Value` field and a `ValueRecord` field, but only one of these fields can have a value. The other field value must be null.

MailmergeTemplate

Represents a mail merge template (a Microsoft Word document) used for performing mail merges for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

- All users can view this object, but you need the "Customize Application" permission to modify it.
- Customer Portal users can't access this object.

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create **Description** Required. Microsoft Word document to use as a mail merge template. Due to limitations with Microsoft Word mail merge templates, your client application can specify the Body field when creating these records, but not when updating them. Limit: 5 MB.

Field	Details
BodyLength	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Length of the Microsoft Word document.
Description	**Type** string **Properties** Create, Filter,Group, Nillable, Sort, Update **Description** Required. Text description of this mail merge template. Limit: 255 characters.
Filename	**Type** string **Properties** Create, Filter, Group, Sort **Description** Required. File name of the Microsoft Word document that was uploaded as a mail merge template. Limit: 255 characters in length.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
LastUsedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date and time when this MailmergeTemplate was last used.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. Name of this mail merge template.
`SecurityOptionsAttachmentHasFlash`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if Flash Injection was detected in the attachment.
`SecurityOptionsAttachmentHasXSSThreat`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if a cross site scripting threat was detected in the attachment.
`SecurityOptionsAttachmentScannedforFlash`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if the attachment has been scanned for Flash Injection.
`SecurityOptionsAttachmentScannedForXSS`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. True if the attachment has been scanned for a cross site scripting threat.

Usage

Use this object to manage mail merge templates for your organization.

SEE ALSO:

Object Basics

MaintenanceAsset

Represents an asset covered by a maintenance plan in field service. Assets can be associated with multiple maintenance plans.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The asset associated with the maintenance asset.
`ContractLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Contract line item associated with the maintenance asset. This field can only list a contract line item that is associated with the asset, and whose parent service contract is associated with the parent maintenance plan.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the maintenance asset was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the product request was last viewed.
`MaintenanceAssetNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-assigned number that identifies the maintenance asset.
`MaintenancePlanId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Maintenance plan associated with the maintenance asset.
`NextSuggestedMaintenanceDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The suggested date of service for the maintenance asset's first work order (not the date the work order is created). This corresponds to the work order's `SuggestedMaintenanceDate`. If left blank when the maintenance asset is created, this field inherits its initial value from the related maintenance plan. This field auto-updates after each batch is generated. Its label in the user interface is Date of the first work order in the next batch.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Work type associated with the maintenance asset. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

MaintenancePlan

Represents a preventive maintenance schedule for one or more assets in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated account, which typically represents the customer receiving the maintenance service.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated contact.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A brief description of the plan.
`DoesAutoGenerateWorkOrders`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Turns on auto-generation of work order batches for a maintenance plan and prohibits the manual generation of work orders via the Generate Work Orders action. If this option is selected, a new batch of work orders is generated for the maintenance plan on the `NextSuggestedMaintenanceDate` listed on each maintenance asset, or on the maintenance plan if no assets are included. If a `GenerationHorizon` is specified, the date of generation is that many days earlier.
`DoesGenerateUponCompletion`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If both this option and `DoesAutoGenerateWorkOrders` are set to true, a new batch of work orders isn't generated until the last work order generated from the maintenance plan is completed. A work order is considered completed when its status falls into one of the following status categories: Cannot Complete, Canceled, Completed, or Closed. If a maintenance plan covers multiple assets, work orders are generated per asset. If a maintenance asset's final work order is completed late, its work order generation is delayed, which may cause a staggered generation schedule between maintenance assets.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last day the maintenance plan is valid.
`Frequency`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** (Required) Amount of time between work orders. The unit is specified in the `FrequencyType` field.
`FrequencyType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description (Required) The unit of frequency: • Days • Weeks • Months • Years For example, to perform monthly maintenance visits you need a work order for each visit, so enter 1 as the `Frequency` and select Months.
`GenerationHorizon`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Moves up the timing of batch generation if `DoesAutoGenerateWorkOrders` is set to true. A generation horizon of 5 means the new batch of work orders is generated 5 days before the maintenance asset's (or maintenance plan's, if there are no assets) `NextSuggestedMaintenanceDate`. The generation horizon must be a whole number.
`GenerationTimeframe`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** (Required) How far in advance work orders are generated in each batch. The unit is specified in the `GenerationTimeframeType` field.
`GenerationTimeframeType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** (Required) The generation timeframe unit: • Days • Weeks • Months • Years For example, if you need work orders for six months, enter 6 and select Months.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the service takes place.
MaintenancePlanNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) An auto-assigned number that identifies the maintenance plan.
MaintenancePlanTitle	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A name for the maintenance plan.
MaintenanceWindowEndDays	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Days after the suggested service date on the work order that its service appointment can be scheduled.
`MaintenanceWindowStartDays`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Days before the suggested service date on the work order that its service appointment can be scheduled. The maintenance window start and end fields affect the Earliest Start Permitted and Due Date fields on the maintenance plan's work orders' service appointments. For example, if you enter 3 for both the maintenance window start and end, the Earliest Start Permitted and the Due Date will be 3 days before and 3 days after, respectively, the Suggested Maintenance Date on each work order. If the maintenance window fields are left blank, the service appointment date fields list their work order's suggested maintenance date.
`NextSuggestedMaintenanceDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The suggested date of service for the first work order (not the date the work order is created). This corresponds to the work order's `SuggestedMaintenanceDate`. You can use this field to enforce a delay before the first maintenance visit (for example, if monthly maintenance should begin one year after the purchase date). Its label in the user interface is Date of the first work order in the next batch. For example, if you want the first maintenance visit to take place on May 1, enter May 1. When you generate work orders, the earliest work order will list a suggested maintenance date of May 1, and the dates on the later work orders will be based on the `GenerationTimeframe` and `Frequency`. **Important:** Maintenance assets also list a `NextSuggestedMaintenanceDate`, which is initially inherited from the maintenance plan. If the plan has maintenance assets, this date auto-updates on the maintenance assets after each batch is generated, but doesn't update on the maintenance plan itself because batch timing is calculated at the maintenance asset level. If the plan doesn't have maintenance assets, this date auto-updates on the maintenance plan after each batch is generated.

Field Name	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the maintenance plan.
ServiceContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract associated with the maintenance plan. The service contract can't be updated if any child maintenance asset is associated with a contract line item from the service contract.
StartDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The first day the maintenance plan is valid.
WorkOrderGenerationStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** (Read Only) Indicates whether the work order generation is in progress or complete. You can generate only one batch at a time.
WorkTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The associated work type. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

MatchingRule

Represents a matching rule that is used to identify duplicate records. This object is available in API version 33.0 and later.

A matching rule compares field values to determine whether a record is similar enough to existing records to be considered a duplicate. For example, a matching rule can specify that if the `Email` and `Phone` values of two records match exactly, the records are possible duplicates. Your organization uses matching rules with duplicate rules to define what happens when duplicates are identified.

If the rule is for a Person Account, `SobjectSubType` is automatically set to `PersonAccount`.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`BooleanFilter`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Specifies filter logic conditions.
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The description of the matching rule.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The developer name for the matching rule.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language selected for your organization.

Field Name	Details
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The name of the matching rule.
MatchEngine	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The match engine used by the matching rule.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix for matching rules for your organization.
RuleStatus	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Required. The activation status of the matching rule. Values are: • *Inactive* • *Deactivating* • *DeactivationFailed* • *Active* • *Activating* • *ActivationFailed* **Important:** The only valid values you can declare when deploying a package are *Active* and *Inactive*.
SobjectSubType	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable Restricted picklist, Sort

Field Name	Details
	Description Read-only. Indicates if the matching rule is defined for the `Person` subtype of `Account`. Valid values are: • `PersonAccount` • `None` If the rule is for a Person Account, `SobjectSubType` is automatically set to `PersonAccount`.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The object for the matching rule.

Usage

Use the Salesforce API to retrieve and view details about MatchingRule and MatchingRuleItem. Use the Salesforce Metadata API to create, update, or delete these objects.

SEE ALSO:

MatchingRuleItem

DuplicateRule

DuplicateResult

MatchingRuleItem

Represents criteria used by a matching rule to identify duplicate records. This object is available in API version 33.0 and later.

A matching rule item determines which field the matching rule uses to identify a duplicate record. It also determines the method used to compare value that two records have for the field. For example, a matching rule item might specify that the `Email` field values of two records must match exactly in order for the records to be considered duplicates.

When a matching rule has multiple matching rule items, it means that multiple fields must match in order for the records to be identified as dupcliates.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`BlankValueBehavior`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies how blank fields affect whether the fields being compared are considered matches. Valid values are: • *`MatchBlanks`* • *`NullNotAllowed`* (default)
`Field`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates which field to compare when determining if a record is similar enough to an existing record to be considered a match.
`MatchingMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Defines how the fields are compared. Choose between the exact matching method and various fuzzy matching methods. Valid values are: • *`Exact`* • *`FirstName`* • *`LastName`* • *`CompanyName`* • *`Phone`* • *`City`* • *`Street`* • *`Zip`* • *`Title`* For details on each matching method, see “Matching Methods Used with Matching Rules” in the Salesforce Help.

Field Name	Details
`MatchingRuleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for the matching rule.
`SortOrder`	**Type** int **Properties** Filter, Group, Sort **Description** The order of the matching rule items for a matching rule.

Usage

Use the Salesforce SOAP API to retrieve and view details about MatchingRule and MatchingRuleItem. Use the Salesforce Metadata API to create, update, or delete these objects.

SEE ALSO:

MatchingRule

DuplicateRule

DuplicateResult

MetadataPackage

Represents a managed or unmanaged package that has been developed in the org you're logged in to.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort

Field Name	Details
	Description The name of the package.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For managed packages, this field is the namespace prefix assigned to the package. For unmanaged packages, this field is blank.

Usage

Here are examples of the types of API queries you can perform.

Query	String
Show all managed and unmanaged packages in the org	`SELECT Name, NamespacePrefix FROM MetadataPackage`
Show only managed packages in the org	`SELECT Name, NamespacePrefix FROM MetadataPackage WHERE NamespacePrefix <> ''`

MetadataPackageVersion

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
BuildNumber	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The build number of the version. For example, if you upload two beta versions, they have build numbers 1 and 2. Then, when you upload a non-beta version, the build number is 3. When you upload a new version, the build number resets to 1.
`MajorVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The first number in a package version number. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`MetadataPackageId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character package ID starting with `033`.
`MinorVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The second number in a package version number. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the package version.
`PatchVersion`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The third number in a package version number, if present. A version number either has an `x.y` format or an `x.y.z` format. The `x` represents the major version, `y` the minor version, and `z` the patch version.
`ReleaseState`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the package version is a beta version, the value is `Beta`. Otherwise, the value is `Released`.

Usage

Here are examples of the types of API queries you can perform.

Query	String
Get all package versions for the package that has a `MetadataPackageID` of 033D00000001xQlIAI	`SELECT Id, Name, ReleaseState, MajorVersion, MinorVersion, PatchVersion FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI'`
Get the package version for the package with a specific `MetadataPackageID` and a major version greater than 1	`SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId ='033D00000001xQlIAI' AND MajorVersion > 1`
Get released package versions for the package with a specific `MetadataPackageID`	`SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI' AND ReleaseState = 'Released'`

Java Code Sample

Suppose you want to push version 3.4.6 of your package to all orgs. Let's write some code to identify the orgs eligible for the upgrade. This example demonstrates how to generate the list of subscriber orgs eligible to be upgraded to version 3.4.6 of a package.

This code sample uses the Web Services Connector (WSC).

```
// Finds all Active subscriber orgs that have the package installed
String PACKAGE_SUBSCRIBER_ORG_KEY_QUERY = "Select OrgKey from PackageSubscribers where
OrgStatus = 'Active' and InstalledStatus = 'I'";

// Finds all MetadataPackageVersions lower than the version given, including the list
// of subscribers for each version
String METADATA_PACKAGE_VERSION_QUERY = "Select Id, Name, ReleaseState, (%s) from"
 + " MetadataPackageVersion where MetadataPackageId = '%s' AND ReleaseState = 'Released'"
```

```
 + " AND (MajorVersion < 3 OR (MajorVersion = 3 and MinorVersion < 4)"
 + " OR (MajorVersion = 3 and MinorVersion = 4 and PatchVersion < 6))";

// conn is an EnterpriseConnection instance initialized with a ConnectionConfig object
// representing a connection to the developer org of the package
QueryResult results = conn.query(String.format(METADATA_PACKAGE_VERSION_QUERY,
PACKAGE_SUBSCRIBER_ORG_KEY_QUERY));

// This list will hold all of the PackageSubscriber objects that are eligible for upgrade
// to the given version
List<PackageSubscriber> subscribers = new ArrayList<>();
for (SObject mpvso : results.getRecords()) {

  // Cast the sObject to a MetadataPackageVersion
  MetadataPackageVersion mpv = (MetadataPackageVersion) mpvso;

  // Add subscribers to our list
  if (mpv.getPackageSubscribers() != null) {
   for (SObject psso : mpv.getPackageSubscribers().getRecords()) {
    subscribers.add((PackageSubscriber) psso);
   }
 }
}
```

Next Step

Create a push request using PackagePushRequest.

Metric

The Metric object represents the components of a goal metric such as its name, metric type, and current value.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CompletionDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the metric.

Field Name	Details
CurrentValue	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The current value of the metric.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the metric. The maximum length is 65,535 characters.
DueDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The due date of the metric.
GoalId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the goal the metric is related to.
InitialValue	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The initial value of the metric.
IsCompletionMetric	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Read only. If `true`, the metric measures whether or not the metric is finished. If `false`, the metric measures how much is finished compared to a targeted value.
`LastComment`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A comment that provides more context about the metric, such as its status or progress. The maximum length is 255 characters.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed a record that is related to this metric.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp that indicates when a user last viewed this metric. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the metric.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description ID of the user who owns the metric.
`Progress`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read only. The overall progress of the metric.
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the related record type.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the metric.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the metric. Possible values include: • Not Started • On Track • Behind • Critical • Completed • Postponed • Canceled • Not Completed
`TargetValue`	**Type** double

Field Name	Details
	Properties Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The target value of the metric.
`Weight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The weight of the metric. The sum of the weights should equal 100%.

MetricDataLink

The link between the metric and the data source, such as a report.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DatasourceFieldName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The field name of the data source, such as a report summary field.
`DataSourceId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the data source.

Field Name	Details
`LastSynchronizationTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time the data was synchronized.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name given to the data link record.
`TargetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the metric that the data is linked to.

MetricDataLinkHistory

This read-only object contains historical information about changes that have been made to the MetricDataLink object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.

Field Name	Details
`MetricDataLinkId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the MetricDataLink.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

MetricFeed

Represents a single feed item in the feed displayed on a Metric record.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort

Field Name	Details
	Description The content of the FeedItem. Required when `Type` is TextPost. Optional when `Type` is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The numbers of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Required if `Type` is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets `Type` to ContentPost.
`ContentSize`	**Type** int **Properties** Available in API version 36.0 and earlier only. Group, Nillable, Sort

Field Name	Details
	Description Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** string **Properties** Available in API version 36.0 and earlier only. Group, Nillable, Sort **Description** Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then `InsertedById` is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>`

Field Name	Details
	• `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the metric record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.

Field Name	Details
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed.

Field Name	Details
	• `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated.

MetricHistory

This read-only object contains historical information about changes that have been made to the Metric object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`MetricId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Metric.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

MetricsDataFile

Represents a data file containing usage metrics on all installations of a managed package in a Salesforce instance. This object is available in API version 30.0 and later.

Supported Calls

`query()`, `delete()`

Fields

Field Name	Details
`MetricsDataFile`	**Type** base64 **Properties** Filter, Query, Sort **Description** A text file containing the usage data encoded in Base 64.
`MetricsDataFileContentType`	**Type** string **Properties** Filter, Query, Sort **Description** The format of the data file. Currently, the only allowed value is `text/csv`.

Field Name	Details
MetricsDataFileLength	**Type** int **Properties** Filter, Query, Sort **Description** The size of the data file in bytes.
MetricsRunDate	**Type** dateTime **Properties** Filter, Query, Sort **Description** The date when the usage metrics collection job was run.
MetricsEndDate	**Type** dateTime **Properties** Filter, Query, Sort **Description** The end time and date for the data collection.
MetricsStartDate	**Type** dateTime **Properties** Filter, Query, Sort **Description** The start time and date for the data collection.
MetricsType	**Type** picklist **Properties** Filter, Query, Sort **Description** The type of data being collected. The possible values are `CustomObject` and `Visualforce`.
NamespacePrefix	**Type** string **Properties** Filter, Query, Sort

Field Name	Details
	Description The namespace prefix of the package for which data is being collected.
`SendingInstance`	**Type** string **Properties** Filter, Query, Sort **Description** The server instance from which this data was collected, for example, "na8."

Usage

Use this object to access customer usage metrics for a managed package. Each record contains one day's data, on either custom objects or Visualforce pages, for all organizations in a Salesforce instance that have the package installed. The following data is collected each day.

- **Custom objects** — the number of records stored in each custom object.
- **Visualforce pages** — the number of times each Visualforce page was accessed, the number of unique users who accessed it, and the average loading time (in milliseconds).

The custom objects data is a snapshot that reflects the state of the organization at the time the database was sampled, while the Visualforce data covers usage over a 24-hour period.

This feature is intended for API access only. The owner of the package must write a secondary process to retrieve the metrics data from the reporting organization, and export it to another system for analysis.

The usage metrics data for all production organizations in a given instance is merged and written into a text file, in a specified format, once a day. If an instance doesn't have any organizations with the package installed or any organizations that accessed Visualforce pages in the package, a blank record is created for that day, with `MetricsDataFileLength` set to zero.

In a record for custom objects, each row of the text file contains usage data in the following order.

- Organization ID
- Organization name
- Organization edition
- Organization status
- Name of the custom object
- Number of records of the custom object on the specified day

The custom object count is a snapshot captured once each day. Here's a section of a sample data file for custom objects. It shows there were 3500 and 1500 records in the `Alpha` and `Beta` custom objects, respectively, in the specified customer organization on the specified day.

```
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","Alpha", "3500"
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","Beta", "1500"
```

In a record for Visualforce pages, each row of the text file contains usage data in the following order.

- Organization ID

- Organization name
- Organization edition
- Organization status
- Package version number
- Name of the Visualforce page
- Number of times the page was accessed
- Number of unique users who accessed the page
- Average loading time of the page, in milliseconds

The Visualforce counts for each organization measure the number of times the page was viewed in the duration between the start and end times. Here's a section of a sample data file for Visualforce pages.

```
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f1","1","1","66.0"
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f2","1","1","128.0"
"00Dxx0000001gbk","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f3","1","1","107.0"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f1","5","1","73.6"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f2","1","1","72.0"
"00Dxx0000001gbf","org1","Enterprise Edition","TRIAL","1.0","/apex/gm12__f3","7","1","50.8"
```

MetricShare

Represents a sharing entry on a Metric object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the metric. The possible values are: • Read Only • Read/Write • Owner This field must be set to an access level that is higher than the organization's default access level for metrics.

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the Metric object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Owner`: User is the owner of the Metric or is in a user role above the Metric owner in the role hierarchy. • `Manual`: User or group has access because a user with “All” access manually shared the Metric with the user or group. • `Rule`: User or group has access via a Metric sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the Metric. This field can’t be updated.

MilestoneType

Represents a milestone (required step in a customer support process). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** A description of the milestone.
`Name`	**Type** string **Properties** Create, Filter, idLookup, Update **Description** The name of the milestone.
`RecurrenceType`	**Type** picklist **Properties** Create,Update **Description** The type of recurrence for the milestone.

Usage

Use this object to query and manage the milestone type for CaseMilestone records.

SEE ALSO:

CaseMilestone

SlaProcess

MobileSettingsAssignment

Represents the assignment of a particular field service mobile settings configuration to a user profile. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`FieldServiceMobileSettingsId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of a set of field service mobile settings.
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the profile to associate with the set of field service mobile settings.

Name

Non-queryable object that provides information about foreign key traversals when the foreign key has more than one parent.

This object is used to retrieve information from related records where the related record may be from more than one object type (a polymorphic foreign key). For example, the owner of a case can be either a user or a group (queue). This object allows retrieval of the owner name, whether the owner is a user or a group (queue). You can use a describe call to access the information about parents for an object, or you can use the `who`, `what`, or `owner` fields (depending on the object) in SOQL queries. This object cannot be directly accessed.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`Alias`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The user alias. This field contains a value only if the related record is a user.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the user or group (queue).
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name of the user, contact, or lead.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the related record is an active user (`true`) or not (`false`). This field contains a value only if the related record is a user.
`LastName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name of the user, contact, or lead.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date

Field	Details
	Properties Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`MiddleName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The middle name of the user, contact, or lead.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the parent of the object queried. If the parent is a user, contact, or lead, the value is a concatenation of the `FirstName`, `MiddleName`, `LastName`, and `Suffix` fields of the related record.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The phone number of the user. This field contains a value only if the related record is a user.
`Profile`	**Type** reference **Properties** Filter, Nillable **Description** The Profile of the user. Only populated if the related record is a user.
`ProfileId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user’s Profile. Only populated if the related record is a user.

Field	Details
Suffix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name suffix of the user, contact, or lead.
Title	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The title of the user, for example CFO or CEO.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** A list of the types of sObjects that can be an owner of this object. You can use this field to filter on a type of owner, for example, return only the leads owned by a user.
Username	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Contains the name that a user enters to log into the API or the user interface. The value for this field is in the form of an email address, and is only populated if the related record is a user.
UserRole	**Type** picklist **Properties** Filter, Nillable **Description** Name of the `Role` played by the user. Only populated for user rows.
UserRoleId	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the user role associated with this object.

Usage

To query on relationships where the parent may be more than one type of object, use `who`, `what`, or `owner` relationship fields.

SEE ALSO:

Object Basics

NamedCredential

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 33.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AuthProviderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Salesforce ID of the authentication provider, which defines the service that provides the login process and approves access to the external system. Only users with the "Customize Application" and "Manage AuthProviders" permissions can view this field. This field is available in API version 39.0 and later.
`CalloutOptionsAllowMergeFieldsInBody`	**Type** boolean **Properties** Filter

Field Name	Details
	Description For Apex callouts, indicates whether the code can use merge fields to populate HTTP request bodies with org data. This field is available in API version 35.0 and later.
`CalloutOptionsAllowMergeFieldsInHeader`	**Type** boolean **Properties** Filter **Description** For Apex callouts, indicates whether the code can use merge fields to populate HTTP headers with org data. This field is available in API version 35.0 and later.
`CalloutOptionsGenerateAuthorizationHeader`	**Type** boolean **Properties** Filter **Description** Indicates whether Salesforce automatically generates a standard authorization header for each callout to the named credential–defined endpoint. This field is available in API version 35.0 and later.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
`Endpoint`	**Type** textarea

Field Name	Details
	Properties Nillable **Description** The root URL of the endpoint.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the MasterLabel.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The master label for the named credential. This display value is the internal label that doesn't get translated.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation.
PrincipalType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Tracks users who are accessing the external system. Anonymous implies that a user identity isn't specified for external system access. Named Principal uses one user identity for all users to access the external system.

Usage

Use the NamedCredential object to query named credentials in your organization.

SEE ALSO:
ExternalDataUserAuth
ExternalDataSource

NamespaceRegistry

Represents a namespace that you can link to scratch orgs that were created from your org's Dev Hub. You use the namespace when developing, packaging, and releasing an app. You can't create this object with the API. Use the **Link Namespace** action in the Dev Hub graphical interface to insert a `NamespaceRegistry` record. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of this namespace registry entry.
`NamespaceOrg`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The org ID of the Developer Edition org where you've registered the namespace you want to link.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The namespace prefix that you want to link to the scratch org.

SEE ALSO:

ActiveScratchOrg

ScratchOrgInfo

NavigationLinkSet

Represents the navigation menu in a community. A navigation menu consists of items that users can click to go to other parts of the community. This object is available in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Navigation menus are available only in communities created using the Customer Service template.

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object’s name in a managed package and the changes are reflected in a subscriber’s organization.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description Language for the navigation menu.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** Label for the navigation menu.
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the community.

NavigationMenuItem

Represents a single menu item in a NavigationLinkSet. Use this object to create, delete, or update menu items in your community's navigation menu. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Navigation menus are available only in communities created using the Lightning community template. To use navigation menus in the Build Your Own template, you must build a custom navigation menu component.

Fields

Field Name	Details
`AccessRestriction`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Determines if the menu item is available to guest users who aren’t required to log in to the community.
`DefaultListViewId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If the value of the `Type` field is SalesforceObject, the value is the ID of the default list view for the object.
`DraftRowID`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the draft navigation menu item. The ID is unique within your organization.
`Label`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text that appears in the navigation menu for this item.
`NavigationLinkSetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The navigation menu that this item is included in.
`Position`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The location of the menu item in the navigation menu.

Field Name	Details
Status	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Represents if the navigation menu item is published or not. The values can only be DRAFT, LIVE, or null. In API versions 42 and earlier, if the Status field is not set, the field defaults to LIVE. When queried and Status is not part of the query filter, only the NavigationMenuItem objects with a status of LIVE return. In API versions 43 and later, if the Status field is not set, the field defaults to DRAFT. When queried and Status is not part of the query filter, all NavigationMenuItem objects return regardless of status.
Target	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** If `Type` is ExternalLink or InternalLink, the target is the URL that the link points to. For ExternalLink, your entry looks like this: *`http://www.salesforce.com`*. For InternalLink, use a relative URL, such as *`/contactsupport`*.
TargetPrefs	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** If `Type` is ExternalLink, determines whether a navigation menu item opens in the same tab.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of navigation menu item. The available values are: • SalesforceObject—Available objects include accounts, cases, contacts, and custom objects. • ExternalLink—Links to a URL outside of your community. For example, *`http://www.salesforce.com`*. • GlobalAction—Enables users to create object records, but the new record has no relationship with other records.

Field Name	Details
	• InternalLink—Links to a relative URL inside your community. For example, `/contactsupport`. • NavigationalTopic—A dropdown list with links to the navigational topics in your community.

Usage

You can add up to 20 navigation menu items. You can translate navigation menu items using the Translation Workbench.

NavigationMenuItemLocalization

Represents the translated value of a navigation menu item in a community. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Navigation menus are available only in communities created using the Lightning community template. To use navigation menus in the Build Your Own template, you must build a custom navigation menu component.

Fields

Field Name	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language of the translated navigation menu item. The picklist contains the following supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr`

Field Name	Details
	• German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the navigation menu item that this translated value applies to.
`Value`	**Type** string

Field Name	Details
	Properties Create, Filter, Sort, Update **Description** The translated text for the navigation menu item. Label is **Translation Text**.

Network

Represents a community, which is a customizable public or private space where employees, end-customers, and partners can collaborate on best practices and business processes. Communities give you the opportunity to share information, records, and files with coworkers and related external stakeholders all in one place. This object is available in API version 26.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
`AllowedExtensions`	**Type** textarea **Properties** Filter, Nillable, Sort, Update **Description** Specifies the types of files allowed in your community. This whitelist of file types lets you control what your community members upload and also prevents spammers from polluting your community with inappropriate files. Available in API version 36.0 and later. Separate file types with a comma (for example: *`jpg,docx,txt`*). You can enter lowercase and uppercase letters. You can enter up to 1,000 characters. To allow all file types, leave this field empty.
`CaseCommentEmailTemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID of the email template used when submitting a comment on a case. This field is available in API version 28.0 and later.
`ChangePasswordEmailTemplateId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the email template used when notifying a user that their password has been reset.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the community.
`EmailFooterLogoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the Document object that displays as an image in the footer of community Chatter emails.
`EmailFooterText`	**Type** string **Properties** Filter, Nillable, Sort, Update **Description** Text that displays in the footer of community Chatter emails.
`EmailSenderAddress`	**Type** email **Properties** Filter, Group, Sort **Description** Read only. Email address from which community emails are sent. Note: To change the `EmailSenderAddress` value, you must first specify `NewSenderAddress`, which triggers the sending of an address

Field Name	Details
	change verification email. After you complete the address verification process, `EmailSenderAddress` changes to the specified `NewSenderAddress`.
`EmailSenderName`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Name from which community emails are sent.
`FirstActivationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date the community was first activated. This field is available in API version 34.0 and later. If the community was activated or inactive prior to the release of API version 34.0, this field returns the date the community was first created.
`ForgotPasswordEmailTemplateId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the email template used when a user forgets their password.
`LockoutEmailTemplateId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the email template used when a user is locked out. This field is available in API version 43.0 and later.
`MaxFileSizeKb`	**Type** int **Properties** Filter, Group, Nillable, Sort, Update **Description** Specifies the maximum file size (in KBs) that members can upload in your community. Available in API version 36.0 and later.

Field Name	Details
	Enter a number between 3072 KB and your org's maximum file size. To use the default limit of 2 GB, leave this field empty.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the community.
`NewSenderAddress`	**Type** email **Properties** Filter, Group, Nillable, Sort, Update **Description** Email address that has been entered as the new value for `EmailSenderAddress` but has not been verified yet. After a user has requested to change the sender email address and has successfully responded to the verification email, the `NewSenderAddress` value overwrites the value in `EmailSenderAddress`. This becomes the email address from which community emails are sent. Note: • If verification is pending for a new email address and you set `NewSenderAddress` to null, this cancels the verification request. • `NewSenderAddress` is automatically set to null after `EmailSenderAddress` has been set to the new verified address. • If verification is pending for a new email address and you specify a different new address for this field, only the latest value is retained and used for verification.
`OptionsAllowInternalUserLogin`	**Type** boolean **Properties** Filter, Update **Description** Specifies whether internal users can log in with their internal credentials on the community login page. This field is available in API version 37.0 and later.
`OptionsAllowMembersToFlag`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Determines whether users can flag posts, comments, or files as inappropriate in the community. This field is available in API version 29.0 and later. The ability to flag files is available in version 30.0 and later.
OptionsEnableTalkingAboutStats	**Type** boolean **Properties** Filter, Update **Description** Determines whether community users see how many people are discussing a topic. The number of people discussing the topic appears as the user types the topic and the system gives topic suggestions. This field is available in API version 41.0 and later. The ability to flag files is available in version 30.0 and later.
OptionsGuestChatterEnabled	**Type** boolean **Properties** Filter, Update **Description** Specifies whether guest users can access public Chatter groups in the community without logging in.
OptionsInvitationsEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can invite others to the community.
OptionsKnowledgeableEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can see knowledgeable people for topics and endorse people for topics.
OptionsNicknameDisplayEnabled	**Type** boolean

Field Name	Details
	Properties Filter, Update **Description** Determines whether user nicknames display instead of their first and last names in most places in the community. A few restrictions to keep in mind about nickname display: • Private messages display full names. You can choose to turn off private messages to avoid this display. • Records and user lookups on records show full names. Keep in mind, though, that you can control record and user visibility with sharing rules. • Mobile notifications in the Salesforce app show full names. You can turn off mobile notifications in the app to avoid this display. • Searches by first, last, and full names aren't restricted and return matches, but the search results display only nicknames. Global search auto-complete recommendations show any first, last, and full names that the user has searched by or accessed via a record or another location. The recent items list also shows first, last, and full under the same conditions.
`OptionsPrivateMessagesEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether users can send and receive Chatter messages in the community.
`OptionsRecognitionBadgingEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines whether Recognition Badges is enabled for the community.
`OptionsReputationEnabled`	**Type** boolean **Properties** Filter, Update **Description** Determines if reputation is calculated and displayed for community members. This field is available in API version 31.0 and later.

Field Name	Details
OptionsSelfRegistrationEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether external users can self-register to join the community. External users are users with Community, Customer Portal, or partner portal licenses. If `true`, displays a **Not a member?** link on the login page that points to the default self-registration page. This field is available in API version 28.0 and later.
OptionsSendWelcomeEmail	**Type** boolean **Properties** Filter, Update **Description** Determines whether a welcome email is sent when a new user is added to the community.
OptionsShowAllNetworkSettings	**Type** boolean **Properties** Filter, Update **Description** Determines whether settings in Community Management that were hidden based on how you set up your community are visible or remain hidden. This field is available in API version 33.0 and later.
OptionsSiteAsContainerEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether the community uses Site.com pages instead of Visualforce tabs. This field is available in API version 29.0 and later.
OptionsTopicSuggestionsEnabled	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description Enables topic suggestions when users write posts. This field is available in API version 41.0 and later. The ability to flag files is available in version 30.0 and later.
OptionsUpDownVoteEnabled	**Type** boolean **Properties** Filter, Update **Description** Determines whether up and down voting is enabled for the community. This field is available in API version 41.0 and later.
SelfRegProfileId	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** ID of the profile assigned to users who self register. Only applies if self registration is enabled for the community. This field is available in API version 29.0 and later.
Status	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Status of the community. Available values are: • `Live`—The community is online and members can access it. Label is `Published`. • `DownForMaintenance`—The community was previously published, but was taken offline. Members with “Create and Set Up Communities” can still access the setup for offline communities regardless of profile or membership. Members are not able to access offline communities, but they still appear in the user interface drop-down as `CommunityName (Offline)`. Label is `Offline`. • `UnderConstruction`—The community has not yet been published. Users with “Create and Set Up Communities” can access communities in this status if their profile is associated with the community. Once a community is published, it can never be in this status again. Label is `Preview`.

Field Name	Details
`UrlPathPrefix`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The `UrlPathPrefix` is a unique string at the end of the URL for this community. For example, in the community URL `UniversalTelco.force.com/customers`, `customers` is the `UrlPathPrefix`.
`WelcomeEmailTemplateId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the email template used when sending welcome emails to new community members.

Usage

Use this object to find, view, and update communities in your organization. If you have “Modify All Data,” “View All Data,” or “Create and Set Up Communities,” you can view all communities in the organization. Users without these permissions only see the `Preview` or `Published` communities that they’re members of. If you have “Create and Set Up Communities,” you can customize community settings.

NetworkActivityAudit

Represents an audit trail of moderation actions in Communities. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
Action	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The moderation action a member performed on a post, comment, or file in a community. Values are: • Flagged as Inappropriate—A community member flagged a post, comment, or file as inappropriate. • Flagged as Spam - A community member flagged a post, comment, or file as spam. • Unflagged—A community member removed the flag from a post, comment, or file. • RemovedFlags—A moderator removed all flags from a post, comment, or file. • DeletedFlaggedItem—A moderator deleted a flagged post, comment, message, or file. • DeletedPendingReviewItem—A moderator deleted a post or comment with pending status. • ModerationRuleFlag—A moderation rule flagged member-generated content. • ModerationRuleBlock—A moderation rule blocked member-generated content. • ModerationRuleReplace—A moderation rule replaced member-generated content. • ModerationRuleReview—A moderation rule sent member-generated content to be reviewed and approved by a moderator. • ModerationRuleFreeze—A moderation rule froze a member because they created content too frequently within a specific time frame. • ModerationRuleNotify—A moderation rule notified moderators because a member created content too frequently within a specific time frame.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Notes entered by the user.

Field Name	Details
	If the entity being tracked is a file, records the version number of the file when it was flagged.
EntityCreatedById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user that created the entity being tracked.
EntityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the entity that is being tracked. The following entities are tracked: ChatterMessage, ContentDocument, ContentVersion, FeedComment, and FeedItem.
EntityType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The key prefix of the entity being tracked.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the item being tracked.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the network (community) where the moderation action was performed.
ParentEntityId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the parent of the entity on which an action was performed. The following entities are tracked: CollaborationGroup, DirectMessage, and User.
`ParentEntityType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The key prefix of the parent of the entity being audited.

Usage

Use this object to view an audit trail of moderation activity for your communities. You must have the “Modify All Data” permission to access this object.

Users with “Moderate Communities Feeds”, “Moderate Communities Files” or “View All Data” can view the audit trail using reports in the Salesforce user interface.

NetworkAffinity

Represents a junction object that associates a user profile with a Network object, that is, with a community. Use NetworkAffinity to assign a default community to a user profile. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

To work with the NetworkAffinity object, you must have View Setup or Customize Application permission.

Fields

Field Name	Details
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the default community associated with a user profile.
ProfileId	**Type** reference **Properties** CreateFilter, Group, Sort, Update **Description** ID of the user profile the default community is assigned to.

Usage

Use the NetworkAffinity object to assign a default community to a user profile. The default community enables you to stamp network-agnostic email notifications to all users with that profile with the selected community's branding. The default community also becomes the target destination for email notification links. Network-agnostic email notifications include notifications about records, like cases, accounts, and opportunities.

The `NetworkId` field is not updatable through the API in Workbench, Apex, or SOAP. If you want to change the value for `NetworkId`, you must delete the record and create one with the right value.

NetworkMember

Represents a member of a community. Members can be either users in your company or external users with portal profiles. This object is available in API version 26.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
DefaultGroupNotificationFrequency	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Required. The default frequency for sending the member's group email notifications when the member joins groups in the community. The valid values are: • `P`—Email on every post • `D`—Daily digests • `W`—Weekly digests • `N`—Never The default value is `W`. In communities, the `Email on every post` option is disabled once more than 10,000 members choose this setting for the group. All members who had this option selected are automatically switched to `Daily digests`. However, this field is not currently enabled. These values are reserved for future use.
`DigestFrequency`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The frequency for sending the member's personal email digest for the community. The valid values are: • `D`—Daily • `W`—Weekly • `N`—Never The default value is `D`. However, daily and weekly personal digests aren't currently available in communities. These values are reserved for future use.
`LastChatterActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The last time the member posted or commented in the community.
`MemberId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of a person who is a member of a community.

Field Name	Details
NetworkId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the community that the member is part of.
PreferencesDisableAllFeedsEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member can automatically receive email for updates in the community, based on the types of feed emails and digests the member has enabled.
PreferencesDisableBookmarkEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a feed item after the member has bookmarked it.
PreferencesDisableChangeCommentEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a change the member has made, such as an update to their profile.
PreferencesDisableDirectMessageEmail	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone sends them a direct message in the community.

Field Name	Details
PreferencesDisableEndorsementEmail	**Type** boolean **Properties** Filter, Update **Description** When false, the member automatically receives email every time someone endorses them for a topic.
PreferencesDisableFollowersEmail	**Type** boolean **Properties** Filter, Update **Description** When false, the member automatically receives email every time someone in the community starts following the member.
DisableItemFlaggedEmail	**Type** boolean **Properties** Filter, Update **Description** When false, the user automatically receives email every time a community member flags a post or comment. This setting only applies for community moderators (with the "Moderate Communities Feeds" permission) and group owners or managers. This field is available in API version 29.0 and later.
PreferencesDisableLaterCommentEmail	**Type** boolean **Properties** Filter, Update **Description** When false, the member automatically receives email every time someone comments on a feed item after the member has commented on the feed item.
PreferencesDisableLikeEmail	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description When `false`, the member automatically receives email every time someone comments on a feed item after the member has liked the feed item.
`PreferencesDisableMarketingCloudEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives marketing emails sent by Journey Builder. Available in API version 41.0 and later.
`PreferencesDisableMentionsPostEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is mentioned in posts.
`PreferencesDisableMessageEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is sent a Chatter message.
`PreferencesDisableProfilePostEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone posts to the member's profile.
`PreferencesDisableSharePostEmail`	**Type** boolean **Properties** Filter, Update

Field Name	Details
	Description When `false`, the member automatically receives email every time the member's post is shared.
`PreferencesDisCommentAfterLikeEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on a post the member has liked.
`PreferencesDisMentionsCommentEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time the member is mentioned in comments.
`PreferencesDisProfPostCommentEmail`	**Type** boolean **Properties** Filter, Update **Description** When `false`, the member automatically receives email every time someone comments on posts on the member's profile.
`ReputationPoints`	**Type** double **Properties** Filter, Sort, Update **Description** The number of reputation points the user has accumulated by performing actions in the community.

Usage

Use this object to query members of a certain community and to update their email notification settings. If you have "Modify All Data," "View All Data," or "Create and Set Up Communities," you can view all members of any community, regardless of your own membership. If you have "Modify All Data" or "Create and Set Up Communities," you can also update any member's email settings. Users without these permissions can update their own email settings and can see members of the communities that they're also members of.

Tip: You can directly update reputation points for a community member via the Salesforce API. You can also use Apex triggers to send custom notifications based on changes to reputation points.

NetworkMemberGroup

Represents a group of members in a community. Members can be either users in your internal organization or external users assigned portal profiles. An administrator adds members to a community by adding a profile or a permission set, and any user with the profile or permission set becomes a member of the community. This object is available in API version 26.0 and later.

Note: If a Chatter customer (from a customer group) is assigned a permission set that is also associated with a community, the Chatter customer won't be added to the community.

Prior to API version 27.0, this object was called NetworkProfile.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Note: The `upsert()` call is not supported for this object.

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
`AssignmentStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of a profile or permission set within a community. Values are: • `Added`—Users with this profile or permission set are members of the community. • `Waiting for Add`—The profile or permission set was added to the community, but the async process hasn't completed yet. After the process is complete, the status is updated to `Added`. • `Waiting for Remove`—Use this status to remove all the community members belonging to a profile or permission set and remove a profile or permission set from a community.
`NetworkId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the community that this group of members is associated with.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the profile or permission set associated with the community.

Usage

Use this object to view the profiles or permission sets associated with a particular community. Profiles and permission sets are added and removed asynchronously, so you can also check the status of a profile or permission set that was updated in a community.

If you have "Modify All Data," "View All Data," or "Create and Set Up Communities," you can view all profiles or permission sets for any community in the organization, regardless of your membership. If you have "Modify All Data" or "Create and Set Up Communities," you can also add profiles or permission sets. Users without these permissions can only find profiles and permission sets for communities that they're members of.

Sample Code

```
// Create a new NetworkMemberGroup with a profile as the ParentId
NetworkMemberGroup nmgInsert = new NetworkMemberGroup();
nmg.setNetworkId("0DBD0000000029o");
nmg.setParentId("00eD0000000z1Ww");
SaveResult[] results = connection.create(new SObject[] { nmgInsert });

// Update an existing NetworkMemberGroup to be removed from the Network
NetworkMemberGroup nmgUpdate = new NetworkMemberGroup();
nmg.setId("0DLD000000003enOAA");
nmg.setAssignmentStatus("WaitingForRemove");
SaveResult[] results = connection.update(new SObject[] { nmgUpdate });
```

NetworkModeration

Represents a flag on an item in a community. This object is available in API version 30.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization.

Fields

Field Name	Details
`EntityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the post, comment, or file that was flagged.
`ModerationType`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** Determines the type of flag applied to an item. Values are: • FlagAsInappropriate • FlagAsSpam
`NetworkId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the community in which the item was flagged.
`Visibility`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Nillable, Sort **Description** Determines visibility of a flagged item. Values are: • SelfAndModerators—The user who flagged the item and any moderators can see the flagged item. This is the default value. • ModeratorsOnly—Only moderators can see the flagged item. If ModeratorsOnly is selected, only moderators can set flags using the API.

Usage

Use this object to view the items flagged for moderation within a community. Additionally, users with "Moderate Feeds" and "Modify All Data" can remove flags.

Flags on items are created either when a member manually flags an item in a community (if flagging is enabled for that community), or when a trigger automatically flags an item because the item met the trigger criteria.

NetworkPageOverride

Represents information about custom pages used to override the default pages in communities. You can create Community Builder (Site.com Studio) or Visualforce pages and override the default pages in a community. Using custom pages allows you to create a more personalized experience for your users. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Only users with the "Create and Setup Networks" permission can update this object.
- You can't override the Change Password Page with a page created using Community Builder (Site.com Studio). You can only override it with a Visualforce page.

Fields

Field Name	Details
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the community where a custom page is used to override a default page.
`OverrideSetting`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of the page used to override a default page in the community. `OverrideSetting` can take the following values: • `Standard`—The standard page that comes by default with the community. • `Designer`—A custom page created using Community Builder (Site.com Studio).

Field Name	Details
	• `Visualforce`—A custom page created using Visualforce.
`OverrideType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The name of the default page in the community that you want to override with a custom page.`OverrideType` can take the following values: • `LoginRequired` • `ChangePassword` • `ForgotPassword` • `SelfReg` • `Home`

NetworkSelfRegistration

Represents the account that self-registering community members are associated with by default. Self-registering users in a community are required to be associated with an account, which the administrator must specify while setting up self-registration for the community. If an account isn't specified, Salesforce creates person accounts (when enabled) for self-registering users. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the account that self-registering users in the community are associated with.
`NetworkId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The ID of the community. Note: You can use only one account per community to assign self-registering users.

NetworkUserHistoryRecent

Represents a community user's history of accessed records. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`,`query()`, `undelete()`

Special Access Rules

Only users with the "Modify All Data" permission can view and delete these data.

Fields

Field	Details
`AccessTimestamp`	**Type** datetime **Properties** Create, Filter, Sort **Description** The time at which the record was accessed.
`ActionType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the action type taken by the user. The possible values are: • Read • Write

Field	Details
DomainName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The domain used to access the record.
FeedCommentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Feed comment accessed by the user.
FeedItemId	**Type** reference **Properties** Create, Filter, Group,Sort, Update **Description** Feed item accessed by the user.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Network ID used to access the record or comment.
NetworkUserId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** User’s network user ID to access the record or comment.
RecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The record that was accessed.

Field	Details
`RecordKeyPrefix`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Record’s ID key prefix.
`Url`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The URL from which the user accessed the record.
`UserType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of user who accessed this record. The possible values include: • Standard • Partner • Customer Portal Manager • Customer Portal User • Guest • High Volume Portal • CSN Only • Self Service

Usage

Use the NetworkUserHistoryRecent object to delete comments, posts, or record access by communities users who would like all such activity to be removed.

NewsFeed

Represents a single feed item on a user's home tab. A Chatter feed shows recent changes to records that the user is following.

NewsFeed is available in API version 18.0 through API version 26.0. In API version 27.0 and later, NewsFeed is no longer available in the SOAP API. Use the Chatter REST API to access NewsFeed.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of NewsFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection makes a change to a record that is tracked, the `CreatedBy` field contains the ID of the system administrator while the `ConnectionId` contains the ID of the PartnerNetworkConnection that made the change. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64

Field	Details
	Properties Nillable **Description** Available in API version 36.0 and earlier only.Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only.The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only.This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime

Field	Details
	Properties Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the

Field	Details
	`CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** ID of the newsfeed record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed.

Field	Details
	• `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. This event is also generated by CTI calls. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, you must specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values:

Field	Details
	• `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to query and retrieve record changes tracked in a news feed. Note the following when working with news feeds:

- This object is read only in the API.
- Users can only query their own news feed.
- Queries retrieve feed items that include mentions from other users.
- Use this object to query and retrieve lead feed items that were associated with a converted lead record.

Users that do not have the "View All Data" permission have the following limitations when querying records:

- Must specify a `LIMIT` clause and the limit must be less than or equal to 1000.
- May include a `WHERE` clause that references NewsFeed fields, but may not include references to fields in related objects. For example, you can filter by `CreatedDate` or `ParentId`, but not by `Parent.Name`.
- May include an `ORDER BY` clause that references NewsFeed fields, but may not include references to fields in related objects. For example, you can `ORDER BY CreatedDate` or `ParentId`, but not by `Parent.Name`.

Tip: To query for the most recent feed items, you should `ORDER BY CreatedDate DESC, Id DESC`.

Note the following SOQL restrictions.

- No SOQL limit if logged-in user has "View All Data" permission. If not, specify a LIMIT clause of 1,000 records or fewer.
- SOQL ORDER BY on fields using relationships is not available. Use ORDER BY on fields on the root object in the SOQL query.

SEE ALSO:

EntitySubscription

FeedComment

FeedTrackedChange

Note

Represents a note, which is text associated with a custom object or a standard object, such as a Contact, Contract, or Opportunity.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** textarea **Properties** Create, Nillable, Update **Description** Body of the note. Limited to 32 KB.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrivate`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, only the note owner or a user with the “Modify All Data” permission can view the note or query it via the API. Note that if a user who does not have the “Modify All Data” permission sets this field to `true` on a note that they do not own, then they can no longer query, delete, or update the note. Label is **Private**.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the note.
`ParentId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** Required. ID of the object associated with the note.
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the note.

Usage

Use this object to manage notes for an object.

SEE ALSO:

Object Basics

OauthToken

Represents an OAuth access token for connected app authentication and can be used to create a user interface for token management. This object is available in API version 32.0 and later.

A connected app integrates an application with Salesforce using APIs. Connected apps use standard SAML and OAuth protocols to authenticate, provide single sign-on, and provide tokens for use with Salesforce APIs. In addition to standard OAuth capabilities, connected apps allow Salesforce admins to set various security policies and have explicit control over who can use the corresponding apps. Each time that a user grants access to an application, the application obtains a new access token.

Supported Calls

`describeSObjects()`, `query()`

Special Access Rules

If you are a user with the “Manage Users” permission, you see all tokens for all users in the organization. Otherwise, you see only your own tokens.

Fields

Field Name	Details
AccessToken	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The refresh token for authorization.
AppMenuItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the App Picker menu item that's associated with this OAuth token.
AppName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the connected app that's associated with this OAuth token.
DeleteToken	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A token that can be used at the revoke OAuth token endpoint to remove this token.
Id	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** Reserved for future use. Currently, the value is always `null`.

Field Name	Details
`LastUsedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The most recent date when the OAuth token was used.
`RequestToken`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The authorization code that was used to request the corresponding AccessToken. With this authorization code, you can revoke the corresponding AccesToken by passsing the DeleteToken.
`UseCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** How often the token has been used.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The owner of the token.

Usage

To delete an AccessToken, send a request to the revoke OAuth token endpoint with the DeleteToken as the parameter. For example, this URL `https://login.salesforce.com/services/oauth2/revoke?token=(the Delete Token)` causes the deletion of the token.

In API version 34.0 and later, this object was enhanced to help manage high instance counts. A `query()` call returns up to 500 rows. A `queryMore()` call returns 500 more, up to 2500 total. No more records are returned after 2500. To make sure you don't miss any records, issue a `COUNT()` query in a SELECT clause for OauthToken. This gives you the total number of records. If there are more than 2500 records, divide your query by filtering on fields, like `UserId`, to return subsets of less than 2500 records.

NoteAndAttachment

This read-only object contains all notes and attachments associated with an object.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsNote`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object contains a note (`true`) or an attachment (`false`).
`IsPrivate`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, only the note owner or a user with the “Modify All Data” permission can view the note or query it via the API. Note that if a regular user who does not have “Modify All Data” permission sets this field to `true` on a note that they do not own, then they can no longer query, delete, or update that note. Label is **Private**.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who owns the note and attachment.

Field	Details
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the parent object.
`Title`	**Type** string **Properties** Filter, Nillable, Group, Sort **Description** Title of the note.

Usage

Use this object to list all notes and attachments for an object.

To retrieve notes and attachments, issue a describe call on an object, which returns a query result for each activity since the record was created. You can't directly query this object.

SEE ALSO:

Note

Attachment

NoteTag

Associates a word or short phrase with a Note.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter

Field Name	Details
	Description ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

NoteTag stores the relationship between its parent TagDefinition and the Note being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

ObjectPermissions

Represents the enabled object permissions for the parent PermissionSet. This object is available in API version 24.0 and later.

To grant a user access to an object, associate an ObjectPermissions record with a PermissionSet that's assigned to a user. ObjectPermissions records are only supported in PermissionSet, not in Profile.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The `Id` of this object's parent PermissionSet.
`PermissionsCreate`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can create records for this object. Requires `PermissionsRead` for the same object to be `true`.
`PermissionsDelete`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can delete records for this object. Requires `PermissionsRead` and `PermissionsEdit` for the same object to be `true`.
`PermissionsEdit`	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can edit records for this object. Requires `PermissionsRead` for the same object to be `true`.

Field Name	Details
PermissionsModifyAllRecords	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can edit all records for this object, regardless of sharing settings. Requires `PermissionsRead`, `PermissionsDelete`, `PermissionsEdit`, and `PermissionsViewAllRecords` for the same object to be `true`.
PermissionsRead	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can view records for this object.
PermissionsViewAllRecords	**Type** boolean **Properties** Create, Filter, Update **Description** If `true`, users assigned to the parent PermissionSet can view all records for this object, regardless of sharing settings. Requires `PermissionsRead` for the same object to be `true`.
SobjectType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object's API name. For example, `Merchandise__c`.

Permission Dependencies

Some user permissions have dependencies on object permissions. For example, if a permission set has the "Transfer Leads" permission, it also has "Read" and "Create" on the leads object.

You can query from ObjectPermissions up to the parent PermissionSet object. For example:

```
SELECT Parent.Name, Parent.PermissionsTransferAnyLead, PermissionsRead, PermissionsCreate
FROM ObjectPermissions
WHERE SobjectType = 'Lead'
```

Determining Object Access with "Modify All Data"

When using SOQL to query object permissions, be aware that some object permissions are enabled because a user permission requires them.

The exception to this rule is when "Modify All Data" is enabled. While it enables all object permissions, it doesn't physically store any object permission records in the database. As a result, unlike object permissions that are required by a user permission—such as "View All Data" or "Import Leads"—the query still returns permission sets with "Modify All Data," but the object permission record will contain an invalid ID that begins with "000". This ID indicates that the object has full access due to "Modify All Data" and the object permission record can't be updated or deleted. To remove full access from these objects, disable "Modify All Data" and then delete the resulting object permission record. This ensures that when using SOQL to find all the objects that have full access, it returns all objects that have this access regardless of whether it's due to "Modify All Data" or because an administrator set full access.

For example, the following will return all permission sets that have "Read" on the Merchandise__c object, regardless of whether it's explicitly defined on the object or implicitly defined through "Modify All Data."

```
SELECT Id, Parent.label, SobjectType, PermissionsRead,
   Parent.PermissionsModifyAllData, ParentId
FROM ObjectPermissions
WHERE PermissionsRead = true and SobjectType = 'Merchandise__c'
```

Nesting Object Permissions

You can nest ObjectPermissions in a PermissionSet query. For example, the following returns any permission sets where "Transfer Leads" is true. Additionally, the result set will include the "Read" object permission on leads. This is done by nesting the SOQL with an object permission query using the relationship name for object permissions: `ObjectPerms`.

```
SELECT Id,Name,PermissionsTransferAnyLead,
(SELECT Id, PermissionsRead from ObjectPerms where SobjectType='Lead')
FROM PermissionSet
WHERE PermissionsTransferAnyLead = true
```

As a result, it's possible to traverse the relationship between the PermissionSet and any child related objects (in this case, ObjectPermissions). You can do this from the PermissionSet object by using the child relationship (`ObjectPerms`, `FieldPerms`, and so on) or from the child object by referencing the PermissionSet with `Parent.`***`permission_set_attribute`***.

It's important to consider when to use a conditional `WHERE` statement to restrict the result set. To query based on an attribute on the permission set object, nest the SOQL with the child relationship. However, to query based on an attribute on the child object, you must reference the permission set parent attribute in your query.

The following two queries return the same columns with different results, based on whether you use the child relationship or parent notation.

```
SELECT Id, Name, PermissionsModifyAllData,
(SELECT Id, SobjectType, PermissionsRead from Objectperms)
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

versus:

```
SELECT Id, SObjectType, PermissionsRead, Parent.Id, Parent.Name,
Parent.PermissionsModifyAllData
FROM ObjectPermissions
WHERE SObjectType='Merchandise__c'
```

SEE ALSO:

PermissionSet

FieldPermissions

ObjectTerritory2AssignmentRule

Represents a territory assignment rule that's associated with an object, such as Account. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the BooleanFilter field on its corresponding ObjectTerritory2AssignmentRule is `null`. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories, assignment rules, assigned records, and assigned users. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`BooleanFilter`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents advanced filter conditions that were specified for the rule in the online application. For example, "(1 AND 2) OR 3."
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your

Field Name	Details
	organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Unique Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the rule is active (true) or inactive (false). Via the API, active rules run automatically when object records are created and edited. The exception is when the value of the IsExcludedFromRealign field on an object record is `true`, which prevents record assignment rules from evaluating that record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the master label in the user interface.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user interface label for the territory type.
`ObjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The object that the rule is defined for. For API version 31, Account only.
`Territory2ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the territory model.

ObjectTerritory2AssignmentRuleItem

A single row of selection criteria for an ObjectTerritory2AssignmentRule object. ObjectTerritory2AssignmentRuleItem can only be created or deleted if the `BooleanFilter` field on its corresponding ObjectTerritory2AssignmentRule object is a `null` value. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The standard or custom object field that the rule item will operate on.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The criterion to apply for the rule item. For example: *`equals`* or *`starts with`*.
`RuleId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the associated ObjectTerritory2AssignmentRule.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order in which this row is evaluated in relation to other ObjectTerritoryAssignmentRuleItem objects for the given ObjectTerritoryAssignmentRule.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The field value or values to evaluate. For example: if the field is `Billing ZIP/Postal Code`, a value might be `94105.`.

ObjectTerritory2Association

Represents an association (by assignment) between a territory and an object record, such as an account. Available only if Enterprise Territory Management has been enabled for your Salesforce org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your org's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`AssociationCause`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The means by which the record was associated with the territory: by rules or manually. User interface field label is `Method`. Manual cause can be set only by a user or via the API. Rules cause is used by the rules engine when the object is assigned.
`ObjectId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the object. For API version 30.0 and later, Account only.
`SobjectType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the record. For API version 30.0 and later, Account only.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory that the record is assigned to.

OpenActivity

This read-only object is displayed in a related list of open activities—future events and open tasks—related to an object. It includes activities for all contacts related to the object. OpenActivity fields for phone calls are only available if your organization uses Salesforce CRM Call Center.

Supported Calls

`describeSObjects()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the related account, which is determined as follows: • The account associated with the `WhatId`, if it exists; or • The account associated with the `WhoId`, if it exists; otherwise • `null` For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Indicates one of the following: • The due date of a task • The date of an event if `IsAllDayEvent` is set to `true` This field has a time stamp that is always set to midnight in the Universal Time Coordinated (UTC) time zone. The time stamp doesn't represent the time of the activity; don't attempt to alter it to accommodate time zone differences. Label is `Date`.
`ActivitySubtype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable. `ActivitySubtype` values: • Task • Email • Call

Field	Details
	• Event • List Email
ActivityType	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Represents one of the following values: `Call`, `Meeting`, or `Other`. Label is `Type`.
AlternateDetailId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of a record the activity is related to which contains more details about the activity. For example, an activity can be related to an EmailMessage record.
CallDisposition	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the result of a given call, for example, “we'll call back,” or “call unsuccessful.” Limit is 255 characters.
CallDurationInSeconds	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Duration of the call in seconds.
CallObject	**Type** string **Properties** Filter, Group,Nillable, Sort **Description** Name of a call center. Limit is 255 characters.

Field	Details
CallType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of call being answered: Inbound, Internal, or Outbound.
ConnectionReceivedId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that shared this record with your organization. This field is available only if your organization has enabled Salesforce to Salesforce and only in API versions 28.0 and later.
ConnectionSentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the PartnerNetworkConnection that your organization shared this record with. This field is available only if your organization has enabled Salesforce to Salesforce, and only in API versions 28.0 and later. The value is always `null`. You can use the PartnerNetworkRecordConnection object to forward records to connections.
Description	**Type** textarea **Properties** Nillable **Description** Contains a description of the event or task. Limit is 32 KB.
DurationInMinutes	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Indicates the duration of the event or task.
EndDateTime	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** Indicates the end date and time of the event or task. Available in versions 27.0 and later. This field is optional, depending on the following: • If `IsAllDayEvent` is true, you can supply a value for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time. If both fields are `null`, the duration defaults to one day. • If `IsAllDayEvent` is false, a value must be supplied for either `DurationInMinutes` or `EndDateTime`. Supplying values in both fields is allowed if the values add up to the same amount of time.
`IsAllDayEvent`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is an event spanning a full day, and the `ActivityDate` defines the date of the event. If the value of this field is set to `false`, then the activity may be an event spanning less than a full day, or it may be a task. Label is `All-Day Event`.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task is closed; value is always `false`). This field is set indirectly by setting `Status` on the task—each picklist value has a corresponding `IsClosed` value. Label is `Closed`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the activity has been moved to the Recycle Bin (`true`) or not (`false`). Label is `Deleted`.
`IsHighPriority`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
`IsReminderSet`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a reminder is set for an activity (`true`) or not (`false`).
`IsTask`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If the value of this field is set to `true`, then the activity is a task; if the value is set to `false`, then the activity is an event. Label is `Task`.
`IsVisibleInSelfService`	**Type** boolean **Properties** Defaulted on create, Filter **Description** If the value of this field is set to `true`, then the activity can be viewed in the self-service portal. Label is `Visible in Self-Service`.
`Location`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the activity is an event, then this field represents the location of the event. If the activity is a task, then the value is `null`.
`OwnerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the user who owns the activity.

Field	Details
`PrimaryAccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `AccountId` value from the activity record. Available in API versions 30.0 and later to organizations that use Shared Activities.
`PrimaryWhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Contains the `WhoId` value from the activity record. Available in API versions 30.0 and later to organizations that have enabled Shared Activities.
`Priority`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the priority of a task, such as high, normal, or low.
`ReminderDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Represents the time at which a reminder is scheduled to fire if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then either the user has deselected the reminder checkbox in the user interface or the reminder has already fired at the time indicated by the value.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Indicates the current status of a task, such as in progress or complete. Each predefined status field sets a value for `IsClosed`. To obtain picklist values, query TaskStatus.

Field	Details
`Subject`	**Type** combobox **Properties** Filter, Nillable, Sort **Description** Contains the subject of the task or event.
`WhatId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatIds` are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`.

Usage

Query activities that are related to an object

1. Optionally, issue a describe call against the object whose activities you want to query, to get a suggestion of the correct SOQL query to use.
2. Issue a SOQL relationship query with a main clause that references the object and an inner clause that references the activity history. For example:

```
SELECT
   (SELECT ActivityDate, Description
    FROM OpenActivities)
FROM Account
WHERE Name Like 'XYZ%'
```

The user interface enforces sharing rules, filtering out related-list items that a user doesn't have permission to see.

The following constraints on users who don't have the "View All Data" permission help prevent performance issues.

- In the main clause of the relationship query, you can reference only one record. For example, you can't filter on all records where the account name starts with "A." Instead, you must reference a single account record.

```
SELECT
   (SELECT ActivityDate, Description
    FROM OpenActivities
    ORDER BY ActivityDate ASC NULLS LAST, LastModifiedDate DESC
    LIMIT 500)
FROM Account
WHERE Name = 'Acme'
LIMIT 1
```

- In the inner clause of the query, you can't use `WHERE`.
- In the inner clause of the query, you must specify a limit of 500 or fewer on the number of rows that are returned in the list.
- In the inner clause of the query, you must sort on `ActivityDate` in ascending order and `LastModifiedDate` in descending order. You can optionally display nulls last. For example: `ORDER BY ActivityDate ASC NULLS LAST, LastModifiedDate DESC`.

SEE ALSO:

Task

OperatingHours

Represents the hours in which a service territory, service resource, or account is available for field service work. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description The description of the operating hours. Add any details that aren't included in the name.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the operating hours record was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the operating hours record was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the operating hours. For example, *`Summer Hours`*, *`Winter Hours`*, or *`Peak Season Hours`*.
`TimeZone`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The time zone which the operating hours fall within.

Usage

By default, only System Administrators can view, create, and assign operating hours.

Service territory members—which are service resources who can work in the territory—automatically use their service territory's operating hours. If a resource needs different operating hours than their territory, create separate operating hours for them from the Operating Hours tab. Then, select the desired hours in the `Operating Hours` lookup field on the service territory member detail page.

To view a service resource's operating hours for a particular territory, navigate to their Service Territories related list and click the Member Number for the territory. This takes you to the service territory member detail page, which lists the member's operating hours and dates during which they belong to the territory.

OperatingHoursFeed

Represents a single feed item on an operating hours record detail page. This object is available in API version 38.0 and later.

An operating hours feed shows changes to tracked fields on an operating hours record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to operating hours in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the operating hours record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

OperatingHoursHistory

Represents the history of changes made to tracked fields on an operating hours record. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and field tracking for operating hours fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`TimeSlotId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the operating hours record being tracked. The history is displayed on the detail page for this record.

Opportunity

Represents an opportunity, which is a sale or pending deal.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Field Type
`AccountId`	**Type** reference

Field	Field Type
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the account associated with this opportunity.
Amount	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Estimated total sale amount. For opportunities with products, the amount is the sum of the related products. Any attempt to update this field, if the record has products, will be ignored. The update call will not be rejected, and other fields will be updated as specified, but the Amount will be unchanged.
CampaignId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of a related Campaign. This field is defined only for those organizations that have the campaign feature Campaigns enabled. The User must have read access rights to the cross-referenced Campaign object in order to create or update that campaign into this field on the opportunity.
CloseDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Required. Date when the opportunity is expected to close.
ConnectionReceivedId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference

Field	Field Type
	Properties Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract that's associated with this opportunity.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a Pricebook2 is specified on the opportunity (i.e., the `Pricebook2Id` field is not blank), then the currency value of this field must match the currency of the PricebookEntry records that are associated with any opportunity line items it has.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Text description of the opportunity. Limit: 32,000 characters.
`ExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read-only field that is equal to the product of the opportunity `Amount` field and the `Probability`. You can't directly set this field, but you can indirectly set it by setting the `Amount` or `Probability` fields.

Field	Field Type
`Fiscal`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If fiscal years are not enabled, the name of the fiscal quarter or period in which the opportunity `CloseDate` falls. Value should be in YYY Q format, for example, '2006 1' for first quarter of 2006.
`FiscalQuarter`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the fiscal quarter. Valid values are 1, 2, 3, or 4.
`FiscalYear`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the fiscal year, for example, 2006.
`ForecastCategory`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Restricted picklist field. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than is implied by the `StageName` value. The values of this field are fixed enumerated values. The field labels are localized to the language of the user performing the operation, if localized versions of those labels are available for that language in the user interface. In API version 12.0 and later, the value of this field is automatically set based on the value of the `ForecastCategoryName` and can't be updated any other way. The field properties Create, Defaulted on create, Nillable, and Update are not available in version 12.0.
`ForecastCategoryName`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Field Type
	Description Available in API version 12.0 and later. The name of the forecast category. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than is implied by the `StageName` value.
`HasOpenActivity`	**Type** boolean **Properties** Defaulted on create, Group, **Description** Indicates whether an opportunity has an open event or task (`true`) or not (`false`). Available in API version 35.0 and later.
`HasOpportunityLineItem`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only field that indicates whether the opportunity has associated line items. A value of `true` means that Opportunity line items have been created for the opportunity. An opportunity can have opportunity line items only if the opportunity has a price book. The opportunity line items must correspond to PricebookEntry objects that are listed in the opportunity Pricebook2. However, you can insert opportunity line items on an opportunity that does not have an associated Pricebook2. For the first opportunity line item that you insert on an opportunity without a Pricebook2, the API automatically sets the `Pricebook2Id` field, if the opportunity line item corresponds to a PricebookEntry in an active Pricebook2 that has a `CurrencyIsoCode` field that matches the `CurrencyIsoCode` field of the opportunity. If the Pricebook2 is not active or the `CurrencyIsoCode` fields do not match, then the API returns an error. You can't update the `Pricebook2Id` or `PricebookId` fields if opportunity line items exist on the Opportunity. You must delete the line items before attempting to update the `PricebookId` field.
`HasOverdueTask`	**Type** boolean **Properties** Defaulted on create, Group, **Description** Indicates whether an opportunity has an overdue task (`true`) or not (`false`). Available in API version 35.0 and later.

Field	Field Type
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Directly controlled by `StageName`. You can query and filter on this field, but you can't directly set it in a create, upsert, or update request. It can only be set via `StageName`. Label is **Closed**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsExcludedFromTerritory2Filter`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33). Indicates whether the opportunity is excluded (*`True`*) or included (*`False`*) each time the APEX filter is executed.
`IsSplit`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only field that indicates whether credit for the opportunity is split between opportunity team members. Label is `IsSplit`.This field is available in versions 14.0 and later for organizations that enabled Opportunity Splits during the pilot period. Warning: This field should not be used. However, it's documented for the benefit of pilot customers who find references to `IsSplit` in code.
`IsWon`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Field Type
	Description Directly controlled by `StageName`. You can query and filter on this field, but you can't directly set the value. It can only be set via `StageName`. Label is **Won**.
`LastActivityDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Value is one of the following, whichever is the most recent: • Due date of the most recent event logged against the record. • Due date of the most recently closed task associated with the record.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LeadSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Source of this opportunity, such as Advertisement or Trade Show.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. A name for this opportunity. Limit: 120 characters.

Field	Field Type
`NextStep`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of next task in closing opportunity. Limit: 255 characters.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who has been assigned to work this opportunity. If you update this field, the previous owner's access becomes Read Only or the access specified in your organization-wide default for opportunities, whichever is greater. If you have set up opportunity teams in your organization, updating this field has different consequences depending on your version of the API: • For API version 12.0 and later, sharing records are kept, as they are for all objects. • For API version before 12.0, sharing records are deleted. • For API version 16.0 and later, users must have the "Transfer Record" permission in order to update (transfer) account ownership using this field.
`Pricebook2Id`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** ID of a related Pricebook2 object. The `Pricebook2Id` field indicates which Pricebook2 applies to this opportunity. The `Pricebook2Id` field is defined only for those organizations that have products enabled as a feature. You can specify values for only one field (`Pricebook2Id` or `PricebookId`)—not both fields. For this reason, both fields are declared nillable.
`PricebookId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** Unavailable as of version 3.0. As of version 8.0, the Pricebook object is no longer available. Use the `Pricebook2Id` field instead, specifying the ID of the Pricebook2 record.

Field	Field Type
`Probability`	**Type** percent **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Percentage of estimated confidence in closing the opportunity. It is implied, but not directly controlled, by the `StageName` field. You can override this field to a different value than what is implied by the `StageName`. Note: If you're changing the `Probability` field through the API using a partner WSDL call, or an Apex `before` trigger, and the value may have several decimal places, we recommend rounding the value to a whole number. For example, the following Apex in a `before` trigger uses the `round` method to change the field value: `o.probability = o.probability.round();`
`RecordTypeId`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to this object.
`StageName`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Required. Current stage of this record. The `StageName` field controls several other fields on an opportunity. Each of the fields can be directly set or implied by changing the `StageName` field. In addition, the `StageName` field is a picklist, so it has additional members in the returned describeSObjectResult to indicate how it affects the other fields. To obtain the stage name values in the picklist, query the OpportunityStage object. If the `StageName` is updated, then the `ForecastCategoryName`, `IsClosed`, `IsWon`, and `Probability` are automatically updated based on the stage-category mapping.
`SyncedQuoteID`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Read only in an Apex trigger. The ID of the Quote that syncs with the opportunity. Setting this field lets you start and stop syncing between the opportunity and a quote. The ID has to be for a quote that is a child of the opportunity.

Field	Field Type
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the territory that is assigned to the opportunity. Available only if Enterprise Territory Management has been enabled for your organization.
`TotalOpportunityQuantity`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Number of items included in this opportunity. Used in quantity-based forecasting.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Type of opportunity. For example, Existing Business or New Business. Label is **Opportunity Type**.

Note: If you are importing Opportunity data and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

Use the Opportunity object to manage information about a sale or pending deal. You can also sync this object with a child Quote. To update an Opportunity, your client application needs "Edit" permission on opportunities. You can create, update, delete, and query Attachment records associated with an opportunity via the API. To split credit for an opportunity among multiple opportunity team members, use the OpportunitySplit object.

Client applications can also create or update opportunity objects by converting a Lead with `convertLead()`.

Note: On opportunities and opportunity products, the workflow rules, validation rules, and Apex triggers fire when an update to a child opportunity product or schedule causes an update to the parent record. This means your custom application logic is enforced when there are updates to the parent record, ensuring higher data quality and compliance with your organization's business policies.

Sample Code—Java

This code starts the sync between an object and a child quote.

```
public void startQuoteSync() {
         Opportunity opp = new Opportunity();
         opp.setId(new ID("006D000000CpOSy"));
         opp.setSyncedQuoteId(new ID("0Q0D000000002OZ"));
   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = binding.update(new SObject[] {opp});
      // check results and do more processing after the update call ...
   }
   catch (Exception ex) {
      System.out.println("An unexpected error has occurred." + ex.getMessage());
      return;
 }
}
```

This code stops the sync between an object and a child quote.

```
public void stopQuoteSync() {
         Opportunity opp = new Opportunity();
         opp.setId(new ID("006D000000CpOSy"));
         opp.setFieldsToNull(new String[]  {"SyncedQuoteId"} );
   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = binding.update(new SObject[] {opp});
      // check results and do more processing after the update call ...
   }
   catch (Exception ex) {
      System.out.println("An unexpected error has occurred." + ex.getMessage());
      return;
 }
}
```

SEE ALSO:

- OpportunityCompetitor
- OpportunityHistory
- OpportunityLineItem
- OpportunityLineItemSchedule
- OpportunityFieldHistory
- Quote
- QuoteLineItem
- PartnerNetworkConnection

OpportunityCompetitor

Represents a competitor on an Opportunity.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CompetitorName`	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** Name of the competitor.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Opportunity.
`Strengths`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the competitor’s strengths. Limit: 1,000 characters.
`Weaknesses`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the competitor’s weaknesses. Limit: 1,000 characters.

Usage

Use this object to manage competitors on an Opportunity, associating multiple competitors on a opportunity and specifying the strengths and weaknesses of each competitor.

SEE ALSO:

Opportunity

OpportunityContactRole

Represents the role that a Contact plays on an Opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of an associated Contact. The API applies user access rights to the associated Opportunity for this object, but not to the associated Contact. The API may return rows from a query on this object that include this field's values for contacts to which the user does not have sufficient access rights. It may also return values for this field for contacts that have been deleted. In either case, the client must perform a query on the contact table for this field's value to determine whether the Contact is accessible to the user and has not been deleted.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the associated Contact plays the primary role on the Opportunity (`true`) or not (`false`). Each Opportunity has only one primary contact. Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort, **Description** Required. ID of an associated Opportunity. This field is non-nullable, and it cannot be updated. You must provide a value for this field when creating new records. You can't change it after it has been created.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** Name of the role played by the associated Contact on the Opportunity, such as Business User or Decision Maker.

Usage

Records of this object type appear in the user interface on the Opportunity detail page. Like most other objects, records of this object type have their own unique ID that you use when updating or deleting records.

Although allowed, we do not recommend that you create multiple relationships between the same Opportunity and a Contact.

SEE ALSO:

Object Basics

OpportunityFeed

Represents a single feed item in the feed displayed on the detail page for an opportunity record. This object is available in API version 18.0 and later.

An opportunity feed shows recent changes to an opportunity record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to opportunities.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn’t create, you must have one of these permissions:

- “Modify All Data”
- “Modify All” on the Opportunity object
- “Moderate Chatter”

Note: Users with the “Moderate Chatter” permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of OpportunityFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn’t updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn’t counted until it's approved by an admin or a person with “CanApproveFeedPostAndComment” or “ModifyAllData” permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.

Field	Details
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).

Field	Details
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.

Field	Details
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the opportunity record that is tracked in the feed. The feed is displayed on the detail page for this record.

Field	Details
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold.

Field	Details
	• `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`.

Field	Details
	• On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for an opportunity record.

SEE ALSO:

Opportunity

EntitySubscription

NewsFeed

UserProfileFeed

OpportunityFieldHistory

Represents the history of changes to the values in the fields of an opportunity. This object is available in versions 13.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field	Details
`OpportunityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Opportunity. Label is **Opportunity ID**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Usage

Use this object to identify changes to any fields on an Opportunity. The OpportunityHistory object represents the history of a change to the `Amount`, `Probability`, `Stage`, or `Close Date` fields of an Opportunity.

This object respects field level security on the parent object.

SEE ALSO:

Opportunity

OpportunityHistory

Represents the stage history of an Opportunity.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Amount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Estimated total sale amount.
`CloseDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the opportunity is expected to close.
`ExpectedRevenue`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Calculated revenue based on the `Amount` and `Probability` fields.
`ForecastCategory`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Category that determines the column in which an opportunity is totaled in a forecast. Label is **To ForecastCategory**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OpportunityId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** ID of the associated Opportunity.
`Probability`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Percentage of estimated confidence in closing the opportunity.
`StageName`	**Type** picklist **Properties** Filter, Group, Sort **Description** Name of the current stage of the opportunity (for example, Prospect or Proposal).

Usage

This object represents the history of a change to the `Amount`, `Probability`, `Stage`, or `Close Date` fields of an Opportunity. The OpportunityFieldHistory object represents the history of a change to any of the fields of an Opportunity. To obtain information about how a particular opportunity is progressing, query the OpportunityHistory records associated with a given Opportunity. Please note that if an opportunity's `Amount`, `Probability`, `Stage`, or `Close Date` fields have not changed, nothing will be returned in the OpportunityHistory objects. In this case, query the OpportunityFieldHistory records associated with a given Opportunity to get more information about changes to the opportunity.

This object is read-only. The system generates a new record whenever a user or client application changes the value of any of the above fields; the then-current values of all of these major fields are saved in the newly-generated object.

This object respects field-level security on the parent object.

Note: The record is automatically deleted if its parent Opportunity is deleted.

SEE ALSO:

Opportunity

OpportunityLineItem

Represents an opportunity line item, which is a member of the list of Product2 products associated with an Opportunity.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

The user must have the "Edit" permissions on Opportunity records in order to create or update opportunity line items on an opportunity.

Fields

Field	Details
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency enabled, and a Pricebook2 is specified on the parent opportunity (that is, the `Pricebook2Id` field is not blank on the opportunity referenced by this object's `OpportunityId`), then the value of this field must match the currency of the `CurrencyIsoCode` field on the PricebookEntry records that are associated with this object.

Field	Details
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the opportunity line item. Limit: 80 characters.
`Discount`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Discount for the product as a percentage. When updating these records: • If you specify `Discount` without specifying `TotalPrice`, the `TotalPrice` is adjusted to accommodate the new `Discount` value, and the `UnitPrice` is held constant. • If you specify both `Discount` and `Quantity`, you must also specify either `TotalPrice` or `UnitPrice` so the system knows which one to automatically adjust.
`HasQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group **Description** Read-only. Indicates whether a quantity schedule has been created for this object (`true`) or not (`false`).
`HasRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Sort **Description** Indicates whether a revenue schedule has been created for this object (`true`) or not (`false`). If this object has a revenue schedule, the `Quantity` and `TotalPrice` fields can't be updated. In addition, the `Quantity` field can't be updated if this object has a quantity schedule. Update requests aren't rejected but the updated values are ignored.
`HasSchedule`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** If either `HasQuantitySchedule` or `HasRevenueSchedule` is `true`, this field is also `true`.
`ListPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard pricebook or a custom pricebook. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the pricebook entry list price.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The opportunity line item name (known as "Opportunity Product" in the user interface). This read-only field is available in API version 30.0 and later.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Opportunity.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required. ID of the associated PricebookEntry. Exists only for those organizations that have Products enabled as a feature. You can specify values for either this field or `ProductId`, but not both. For this reason, both fields are declared nillable.
`ProductId`	**Type** reference

Field	Details
	Properties Create, Filter, Nillable **Description** ID of the related Product record. This field is unavailable as of version 3.0 and is only provided for backward compatibility. The Product object is unavailable beginning with version 8.0. Use the `PricebookEntryId` field instead, specifying the ID of the PricebookEntry record.
`Product2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related Product2 record. This is a read-only field available in API version 30.0 and later. Use the `PricebookEntryId` field instead, specifying the ID of the PricebookEntry record.
`ProductCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** This read-only field is available in API version 30.0 and later. It references the value in the ProductCode field of the related Product2 record.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** Read-only if this record has a quantity schedule, a revenue schedule, or both a quantity and a revenue schedule. When updating these records: • If you specify `Quantity` without specifying the `UnitPrice`, the `UnitPrice` value will be adjusted to accommodate the new `Quantity` value, and the `TotalPrice` will be held constant. • If you specify both `Discount` and Quantity, you must also specify either `TotalPrice` or `UnitPrice` so the system can determine which one to automatically adjust.

Field	Details
`RecalculateTotalPrice`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Changes behavior of OpportunityLineItem calculations when a line item has child schedule rows for the `Quantity` value. When enabled, if the rollup quantity changes, then the quantity rollup value is multiplied against the sales price to change the total price. Product2 flag must be set to true.
`ServiceDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when the product revenue will be recognized and the product quantity will be shipped. Whether this value is used by customizable forecasting depends upon the Forecast Date setting for the organization: • Opportunity Close Date—`ServiceDate` is ignored. • Product Date—`ServiceDate` is used if not `null`. • Schedule Date—`ServiceDate` is used if not `null` and there are no revenue schedules present for this line item, that is, there are no OpportunityLineItemSchedule records with a field `Type` value of Revenue that are children of this record.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number indicating the sort order selected by the user. Client applications can use this to match the sort order in Salesforce.
`Subtotal`	**Type** currency **Properties** Filter, Nillable **Description** Difference between standard and discounted pricing. Converted currency amounts when the opportunity's currency is different from the user's currency.
`TotalPrice`	**Type** currency

Field	Details
	Properties Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** This field is available only for backward compatibility. It represents the total price of the OpportunityLineItem. If you do not specify `UnitPrice`, this field is required. If you specify `Discount` and `Quantity`, this field or `UnitPrice` is required. When updating these records, you can change either this value or the `UnitPrice`, but not both at the same time. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update request. To insert the `TotalPrice` via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity. This field is read-only if the opportunity line item has a revenue schedule. If the opportunity line item does not have a schedule or only has quantity schedule, this field can be updated.
`UnitPrice`	**Type** currency **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The unit price for the opportunity line item. In the Salesforce user interface, this field's value is calculated by dividing the total price of the opportunity line item by the quantity listed for that line item. Label is **Sales Price**. This field or `TotalPrice` is required. You can't specify both. If you specify `Discount` and `Quantity`, this field or `TotalPrice` is required.

Usage

An Opportunity can have associated OpportunityLineItem records only if the Opportunity has a Pricebook2. An OpportunityLineItem must correspond to a Product2 that is listed in the opportunity's Pricebook2. For information about inserting OpportunityLineItem for an opportunity that does not have an associated Pricebook2 or any existing line items, see Effects on Opportunities.

This object is defined only for those organizations that have products enabled as a feature. If the organization does not have the products feature, this object does note appear in the `describeGlobal()` call, and you can't use `describeSObjects()` or query the OpportunityLineItem object.

For a visual diagram of the relationships between OpportunityLineItem and other objects, see Product and Schedule Objects.

Note: If multicurrency option has been enabled, the `CurrencyIsoCode` field is present. It can't be modified, and is always set to the value of the `CurrencyIsoCode` of the parent Opportunity.

Effects on Opportunities

Opportunities that have associated OpportunityLineItem records are affected in the following ways:

- Creating an OpportunityLineItem increments the Opportunity `Amount` value by the `TotalPrice` of the OpportunityLineItem. Additionally, inserting an OpportunityLineItem increments the `ExpectedRevenue` on the opportunity by the `TotalPrice` times the opportunity `Probability`.
- The Opportunity `Amount` becomes a read-only field when the opportunity has line items. The API ignores any attempt to update this field on an opportunity with line items. Update requests are not rejected, but the updated value is ignored.
- You can't update the `PricebookId` field or the `CurrencyIsoCode` field on the opportunity if line items exist. The API rejects any attempt to update these fields on an opportunity with line items.
- When you create or update an OpportunityLineItem, the API verifies that the line item corresponds to a PricebookEntry in the Pricebook2 that is associated with the opportunity. If the opportunity does not have an associated Pricebook2, the API automatically sets the pricebook on the opportunity if the line item corresponds to a PricebookEntry in an active Pricebook2, and if the PricebookEntry has a `CurrencyIsoCode` field that matches the `CurrencyIsoCode` field of the opportunity. If the Pricebook2 is not active or the `CurrencyIsoCode` fields do not match, an error is returned.
- The Opportunity `HasOpportunityLineItem` field is set to `true` when an OpportunityLineItem is inserted for that Opportunity.

SEE ALSO:

OpportunityLineItemSchedule

OpportunityLineItemSchedule

Represents information about the quantity, revenue distribution, and delivery dates for a particular OpportunityLineItem.

In API version 38.0 and later, when an OpportunityLineItem record is created for a product with a previously established schedule, an OpportunityLineItemSchedule record is also created.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. This field is available in version 10.0 and later.
`Description`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the opportunity line item schedule. Limit: 80 characters. Label is **Comments**.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
OpportunityLineItemId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the associated OpportunityLineItem.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Update **Description** Required. The total number of units to be scheduled in a quantity schedule.
Revenue	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The revenue that should be recognized, or the quantity that should be shipped, or both - depending upon the value of `Type`.
ScheduleDate	**Type** date **Properties** Create, Filter, Update

Field	Details
	Description Required. The date the associated OpportunityLineItem is to be scheduled for an event: delivery, shipping, or any other date you wish to track.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** The type of the schedule. Required when inserting an OpportunityLineItemSchedule. Valid values include `Quantity`, `Revenue`, or `Both`.

Allowed Type Field Values

The allowed `Type` values for an OpportunityLineItemSchedule depend on the product-level schedule preferences and whether the line item has any existing schedules. The following criteria must be met:

- The Product2 on which the OpportunityLineItem is based must have the appropriate `CanUseRevenueSchedule` or `CanUseQuantitySchedule` fields (or both) set to `true`.
- When you create a schedule for a line item that does not have any existing schedules, you can specify any valid value.
- If you create a schedule for a line item that already has existing schedules, the new schedule must be consistent with the existing schedules. The following matrix outlines the allowable values:

Value of HasRevenueSchedule on line item	Value of HasQuantitySchedule on line item	Allowable Type Values
false	false	`Revenue`, `Quantity`, both
false	true	`Quantity`
true	false	`Revenue`
true	true	both

Allowed Quantity and Revenue Field Values

The allowable `Quantity` and `Revenue` field values depend on the value of the `Type` field:

Type Value	Allowable Quantity Value	Allowable Revenue Value
`Revenue`	Null	Non-null
`Quantity`	Non-null	Null
both	Non-null	Non-null

The Quantity and Revenue fields have the following restrictions when this object is updated:

- For a schedule of Type Quantity, you can't update a null Revenue value to non-null. Likewise for a schedule of Type Revenue, you can't update a null Quantity value to non-null.
- You can't null out the Quantity field for a schedule of Type Quantity. Likewise you can't null out the Revenue field for a schedule of Type Revenue.
- You can't null out either the Revenue or Quantity fields for a schedule of type Both.

Usage

OpportunityLineItemSchedule supports two types of schedules:

- Quantity schedules
- Revenue schedules

The user must have edit access rights on the Opportunity in order to create or update line item schedules on that opportunity.

Products and Schedules Must Be Enabled

The OpportunityLineItemSchedule object is defined only for those organizations that have the products and schedules features enabled. If the organization does not have the products and schedules features, the OpportunityLineItemSchedule object is not returned in a describe, and you can't describe or query OpportunityLineItemSchedule records.

Effects on Opportunities and Opportunity Line Items

OpportunityLineItemSchedule records affect opportunities and opportunity line items in the following ways:

- Inserting an OpportunityLineItemSchedule of Type "Revenue" or "Quantity" increments the TotalPrice field on the OpportunityLineItem by the OpportunityLineItemSchedule Revenue amount. Inserting an OpportunityLineItemSchedule of Type Quantity or Both increments the Quantity field on the OpportunityLineItem by the OpportunityLineItemSchedule Quantity amount.
- Creating an OpportunityLineItemSchedule record affects the original opportunity:
  1. The Opportunity Amount is incremented the by OpportunityLineItemSchedule revenue amount
  2. The Opportunity ExpectedRevenue is incremented by the line item schedule amount multiplied by the Opportunity Probability
- Deleting an OpportunityLineItemSchedule has a similar effect on the related OpportunityLineItem and Opportunity. Deleting an OpportunityLineItemSchedule decrements the OpportunityLineItem TotalPrice by the deleted OpportunityLineItemSchedule Quantity or Revenue amount. The Opportunity Amount is also decremented by the OpportunityLineItemSchedule Quantity or Revenue amount, and the Opportunity ExpectedRevenue is reduced by OpportunityLineItemSchedule Quantity or Revenue amount multiplied by the Opportunity Probability.

Deleting an Opportunity Line Item Schedule

Deleting the last remaining schedule will set the corresponding `HasQuantitySchedule` or `HasRevenueSchedule` flags (or both) to `false` on the parent line item.

SEE ALSO:

OpportunityLineItem

Product2

delete()

OpportunityOverride

Represents a forecast override of an Opportunity. This read-only object is specific to customizable forecasting. It has a parent-child relationship with LineitemOverride.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Requires the "View All Data" permission.

Fields

Field	Details
`AmountInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden amount rolls up through the forecast hierarchy (`true`), or was overridden by the owner of the OpportunityOverride (`false`).
`ForecastCategoryInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden forecast category rolls up through the forecast hierarchy (`true`) or was overridden by the owner of the OpportunityOverride (`false`).

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the associated Opportunity.
OutOfDate	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` if a subordinate user's OpportunityOverride, or the opportunity itself, has been updated since this override was last updated, such that an overridden value on this override may be obsolete. For example, a subordinate user has more recently overridden the same period, category, or amount field.
OverrideAmount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The total monetary amount of the opportunity, possibly overridden.
OverrideComment	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The comment entered on the opportunity forecast edit page. Limit: 255 characters.
OverrideForecastCategory	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** The forecast category of the opportunity, possibly overridden.
`OverridePeriodId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the associated fiscal Period, possibly overridden. If you are using custom fiscal years and the period falls after your custom fiscal year has ended, then the override is not returned.
`OverrideQuantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity of the opportunity, possibly overridden.
`OwnerId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the OpportunityOverride owner.
`PeriodInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the overridden period rolls up through the forecast hierarchy (`true`) or was overridden by the OpportunityOverride owner (`false`).
`QuantityInherited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether the overridden quantity rolls up through the forecast hierarchy (`true`) or was overridden by the OpportunityOverride owner (`false`).

Important: You can't use the `<apex:relatedList>` component to add related lists such as OpportunityForecast to Visualforce pages because the `RelationshipName`field of OpportunityOverride is not exposed in the API. Use the `<apex:detail>` component instead.

SEE ALSO:

LineitemOverride

OpportunityOwnerSharingRule

Represents a rule for sharing an opportunity with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Opportunities owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description The ID representing the target user or group. The target user or group is being given access.

Usage

Use this object to manage the sharing rules for opportunities. General sharing and Territory-related sharing use this object.

SEE ALSO:

Case

Metadata API Developer Guide: SharingRules

OpportunityPartner

This read-only object represents a partner relationship between an Account and an Opportunity. This object is automatically created when a Partner object is created for a partner relationship between an account and an opportunity.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`AccountToId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner Account in the partner relationship.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.

Field	Details
`IsPrimary`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the account is the opportunity's primary partner (`true`) or not (`false`). Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Opportunity that is in the partner relationship.
`Role`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The UserRole that the Account has on the Opportunity. For example, `Reseller` or `Manufacturer`.

Creating an Account-Opportunity Partner Relationship

When you create a partner relationship between an account and an opportunity (when you create a Partner object and specify the `OpportunityId` field), the API automatically creates an OpportunityPartner with the corresponding values:

- The value of the Partner field `AccountToId` maps to the value of the OpportunityPartner field `AccountToId`.
- The values of the `OpportunityId`, `Role`, and `IsPrimary` fields in both objects are the same.
- If you set the `IsPrimary` value to 1 (`true`) upon insert of a new OpportunityPartner, any other existing primary partners for that opportunity will automatically have the `IsPrimary` value set to 0 (`false`).

This mapping allows the API to manage the objects and their relationship efficiently.

SEE ALSO:

Partner

AccountPartner

OpportunityShare

Represents a sharing entry on an Opportunity.

Supported Calls

`describeSObjects()`, `create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`OpportunityAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Level of access that the user or group has to the opportunity. The possible values are: • `Read` • `Edit` • `All`—This value is not valid when creating, updating, or deleting records. This field must be set to an access level that's higher than the org's default access level for opportunities.
`OpportunityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the opportunity associated with this sharing entry. This field can't be updated.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field	Details
	Description Reason that this sharing entry exists. You can write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • `Owner`—User is the owner of the opportunity. • `Manual`—User or group has access because a user with "All" access manually shared the opportunity with the user or group. • `Rule`—User or group has access via an opportunity sharing rule. • `ImplicitChild`—User or group has access to the opportunity on the account associated with this opportunity. • `Sales Team`—User has access to the opportunity because the user is on the opportunity sales team for the opportunity. The OpportunityTeamMember object sets the access level. See OpportunityTeamMember for more information.
`UserOrGroupId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user or group that has been given access to the opportunity. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit opportunities owned by other users.

If you attempt to create a record that matches an existing record, any modified fields are updated, the system returns the existing record.

If an opportunity is shared in multiple ways with a user, you don't always see multiple sharing records. If a user has access to an opportunity for one or more of the following RowCause values, the records in the OpportunityShare object are compressed into one record with the highest level of access.

- `Manual`
- `Owner`

SEE ALSO:

Object Basics

OpportunitySplit

OpportunitySplit credits one or more opportunity team members with a portion of the opportunity amount. This object is available in API version 16.0 and later for pilot customers, and version 28.0 and later for others.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`OpportunityId`	**Type** reference **Properties** Create, FilterGroup, Sort **Description** ID of the opportunity for which the split is being created. Label is `Opportunity ID`.
`Split`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Read-only. Automatically-generated number identifying the split within the opportunity.
`SplitAmount`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Monetary amount of the split. Label is `Split Amount`.
`SplitNote`	**Type** string **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** Enter any notes or comments about the split. Character limit is 255. Label is `Split Note`.
`SplitOwnerId`	**Type** reference

Field	Details
	Properties Create, Filter,Group, Sort **Description** The opportunity owner. Label is `User ID`.
`SplitPercentage`	**Type** percent **Properties** Create, Filter, Sort, Update **Description** Split percentage that this team member will receive. If the split type is validated to a 100% total, this number can range from 0 to 100. If the total isn't validated, this number can range from 0 to 1,000. Label is `Split (%)`.
`SplitTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Auto-generated, numeric ID for the split type defined by the OpportunitySplitType object. This field is available in API version 28 and later. If this field is blank, the system automatically specifies the default split type for the opportunity amount, which is validated to 100%.

Usage

Use the OpportunitySplit object to manage splits for an opportunity.

If you change the opportunity owner using the API, the old owner remains on the opportunity team with either Read-only access, or the level of access specified in your organization-wide defaults.

OpportunitySplitType

OpportunitySplitType provides unique labels and behavior for each split type. This object is available in API version 28.0 and later.

There are two default split types: revenue splits, which must total 100%, and overlay splits, which can total any percentage.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Sort, Update **Description** Describes the purpose of the split type, providing context to future developers.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Enables or disables the split type.
`IsTotalValidated`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** If `true`, the split must total 100%. If `false`, the split can total any percentage.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates language of split labels in the user interface.

Field Name	Details
ManageableState	**Type** ManageableState enumerated list **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the manageable state of the specified component that is contained in a package: • beta • deleted • deprecated • installed • released • unmanaged For more information about states of manageability for components in Salesforce AppExchange packages, see "Planning the Release of Managed Packages" in the Salesforce online help. This field is available in API version 38.0 and later.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The user-interface label for the split type.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.

Field Name	Details
	• In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.
`SplitEntity`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The containing record type, such as an opportunity. Available in API version 30 and later.
`SplitField`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Indicates which currency field of the opportunity object is split. Available in API version 30 and later.
`SplitDataStatus`	**Type** picklist **Properties** Filter, Group, Nillable,Restricted picklist, Sort,Update **Description** Indicates the status of the split type. Available in API version 30 and later.

OpportunityStage

Represents the stage of an Opportunity in the sales pipeline, such as New Lead, Negotiating, Pending, Closed, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
ApiName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
DefaultProbability	**Type** percent **Properties** Filter, Nillable, Sort, **Description** The default percentage estimate of the confidence in closing a specific opportunity for this opportunity stage value. Label is **Probability (%)**.
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Description of this opportunity stage value. Limit: 255 characters.
ForecastCategory	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The default forecast category for this opportunity stage value. The forecast category automatically determines how opportunities are tracked and totaled in a forecast.
ForecastCategoryName	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Available in API version 12.0 and later. The default forecast category value for this opportunity stage value.
IsActive	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value is active (`true`) or not (`false`). Inactive opportunity stage values are not available in the picklist and are retained for historical purposes only.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value represents a closed opportunity (`true`) or not (`false`). Multiple opportunity stage values can represent a closed opportunity. Label is **Closed**.
`IsWon`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this opportunity stage value represents a won opportunity (`true`) or not (`false`). Multiple opportunity stage values can represent a won opportunity. Label is **Won**.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this opportunity stage value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the opportunity stage picklist. These numbers are not guaranteed to be sequential, as some previous opportunity stage values might have been deleted.

Usage

This object represents a value in the opportunity stage picklist, which provides additional information about the stage of a Opportunity, such as its probability or forecast category. Query this object to retrieve the set of values in the opportunity stage picklist, and then use that information while processing Opportunity records to determine more information about a given opportunity. For example, the application could test whether a given opportunity is won or not based on its `StageName` value and the value of the `IsWon` property in the associated OpportunityStage object.

This object is read-only via the API.

SEE ALSO:

Object Basics

OpportunityTag

Associates a word or short phrase with an Opportunity.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter

Field Name	Details
	Description ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

OpportunityTag stores the relationship between its parent TagDefinition and the Opportunity being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

OpportunityTeamMember

Represents a User on the opportunity team of an Opportunity.

See also UserTeamMember, which represents a User who is on the default opportunity team of another user.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist

Field	Details
	Description Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**. Note: An OpportunityTeamMember record that is deleted is not moved to the Recycle Bin and cannot be undeleted, unless the record was cascade-deleted when deleting a related Opportunity. For directly deleted OpportunityTeamMember records, don't use the `isDeleted` field to detect deleted records in SOQL queries or `queryAll()` calls. Instead, use `getDeleted()`.
`Name`	**Type** string **Properties** Filter, Nillable, Sort **Description** The team member name. This read-only field is available in API version 30.0 and later.
`OpportunityAccessLevel`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Opportunity access level for this team member. Valid values: • `Read` • `Edit` This field is supported in triggers, but not in workflows or validation rules. It is editable in API version 36.0 and later.
`OpportunityId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the Opportunity associated with this opportunity team. This field can't be updated.

Field	Details
PhotoURL	**Type** URL **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the users Chatter photo URL. This field is available in API version 32.0 and later.
TeamMemberRole	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role that the team member has on the opportunity. The org's admin sets the valid values in the Opportunity Team Roles picklist. Label is **Team Role**.
Title	**Type** string **Properties** Filter, Nillable, Sort, Group **Description** Read only. Retrieves the user's title. This field is available in API version 36.0 and later.
UserId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the opportunity team. This field can't be updated.

Usage

If you create a record for this object and it matches an existing record, the system updates any modified fields and returns the existing record.

In the user interface, users can set up an opportunity team for the opportunities they own. The opportunity team includes other users that are working on the opportunity with them. This object is available only in organizations that have enabled team selling.

Note: The behavior for changing ownership of opportunities is different using the user interface when the previous owner is on an opportunity team. For example, when you change the owner of an opportunity using the API, the previous owner's access becomes Read Only or the access specified in your organization-wide default for opportunities, whichever is greater. However, performing this same action in the user interface allows you to select the access level for the previous owner when the previous owner is on an opportunity team.

SEE ALSO:

UserTeamMember

Order

Represents an order associated with a contract or an account.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Required. ID of the Account associated with this order. Can only be updated when the order's `StatusCode` value is *`Draft`*.
`ActivatedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort,Update **Description** ID of the User who activated this order.
`ActivatedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** Date and time when the order was activated.
`BillingCity`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** City for the billing address for this order. Maximum size is 40 characters.
`BillingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the billing address for this order. Maximum size is 80 characters.
`BillingCountryCode (beta)`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the billing address for this order.
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`BillingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Postal code for the billing address for this order. Maximum size is 20 characters.
BillingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the billing address for this order. Maximum size is 80 characters.
BillingStateCode (beta)	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the order's billing address.
BillingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address for the billing address.
BillToContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact that the order will be billed to.
CompanyAuthorizedById	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user who authorized the account associated with the order.
CompanyAuthorizedDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Date on which the order was authorized by your organization.
`ContractId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract associated with this order. Can only be updated when the order's `StatusCode` value is *`Draft`*.
`CustomerAuthorizedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact who authorized the order.
`CustomerAuthorizedDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date on which the contact authorized the order.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the order.
`EffectiveDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Date at which the order becomes effective. Label is **Order Start Date**.
`End Date`	**Type** date

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Date at which the order ends. Label is **Order End Date**.
IsReductionOrder	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Read-only. Determines whether an order is a reduction order. Label is **Reduction Order**.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name for this order.
OpportunityId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description ID for the opportunity that's associated with this order.
`OrderNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Order number assigned to this order (not the unique, system-generated ID assigned during creation). Maximum size is 30 characters.
`OrderReferenceNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Order reference number assigned to this order. Maximum size is 80 characters.
`OriginalOrderId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort **Description** Optional. ID of the original order that a reduction order is reducing, if the reduction order is reducing a single order. Label is **Original Order**. Editable only if `isReductionOrder` is *`true`*. If the reduction order is reducing more than one order, leave blank.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. ID of the User or queue that owns this order.
`PoDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date of the purchase order.

Field Name	Details
PoNumber	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Number identifying the purchase order. Maximum is 80.
Pricebook2Id	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Required. ID of the price book associated with this order.
QuoteId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the quote that's associated with this order. If you set `QuoteId` to null, `QuoteLineItemId` on all of the order's child order products is set to null.
RecordTypeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the record type assigned to this order.
ShippingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City of the shipping address. Maximum size is 40 characters.
ShippingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Country of the shipping address. Maximum size is 80 characters.
`ShippingCountryCode (beta)`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the order's shipping address.
`ShippingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`ShippingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`ShippingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code of the shipping address. Maximum size is 20 characters.
`ShippingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State of the shipping address. Maximum size is 80 characters.

Field Name	Details
ShippingStateCode (beta)	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the order's shipping address.
ShippingStreet	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street address of the shipping address. Maximum of 255 characters.
ShipToContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contact the order will be shipped to.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Picklist of values that indicate order status. Each value is within one of two status categories defined in `StatusCode`. For example, the status picklist might contain *`Draft`*, *`Ready for Review`*, and *`Ready for Activation`* values with a `StatusCode` of *`Draft`*.
StatusCode	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The status category for the order. An order can be either *`Draft`* or *`Activated`*. Label is **Status Category**.
TotalAmount	**Type** currency

Field Name	Details
	Properties Filter, Sort **Description** The total amount for the order products associated with this order.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The type of order.

Usage

The `Status` field specifies the current state of an order. Status strings represent its current state (*`Draft`* or *`Activated`*).

When a client application creates an order, the `Status Code` must be *`Draft`* and the `Status` must be any value that corresponds to a `Status Code` of *`Draft`*. The application can subsequently activate an order by updating it and setting the value in its `Status` field to an *`Activated`* state; however, the `Status` field is the only field you can update when activating the order.

After an order is activated, your client application can change the `Status` back to the *`Draft`* state—but only if the order doesn't have any child reduction order products. Your client application can delete orders when the `Status` is *`Draft`* but not when its `Status` is *`Activated`*.

Client applications can use the API to create, update, delete, and query any Attachment associated with an order.

SEE ALSO:

OrderFeed

OrderHistory

OrderItem

OrderFeed

Represents a single feed item in the feed displayed on an order.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"

- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the OrderFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.

Field Name	Details
ContentDescription	**Type** textarea **Properties** Create, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if Type is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets Type to ContentPost.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the InsertedBy value is set to the ID of the logged-in user.

Field Name	Details
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Sort

Field Name	Details
	Description The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the order record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `Type ContentPost`.
`Title`	**Type** string

Field Name	Details
	Properties Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of FeedItem: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question.

Field Name	Details
	• `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only.

Field Name	Details
	Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for an order record.

SEE ALSO:

Order

OrderHistory

Represents historical information about changes that have been made to the standard fields of the associated order, or to any custom fields with history tracking enabled.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the order field that was modified, or a special value to indicate some other modification to the order.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description New value of the modified order field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified order field. Maximum of 255 characters.
`OrderId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the order associated with this record.

Usage

Order history entries are automatically created each time an order is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field-level security on the parent object.

SEE ALSO:

Order

OrderItem

Represents an order product that your organization sells.

Supported Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
AvailableQuantity	**Type** double **Properties** Filter, Nillable, Sort **Description** Amount of an order product that is available to be reduced. Value must be greater than or equal to 0. An order product is reducible only if `AvailableQuantity` is greater than 0. Value is always 0 if the order product's parent order is a reduction order.
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of this object.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Optional. Last day the order product is available.
ListPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** List price for the order product. Value is inherited from the associated `PriceBookEntry` upon order product creation.
OrderId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the order that this order product is a child of.

Field Name	Details
OrderItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** Automatically-generated number that identifies the order product.
OriginalOrderItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `isReductionOrder` on the parent order is *`true`*. ID of the original order product being reduced.
PricebookEntryId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated PricebookEntry. This field must be specified when creating OrderItem records. It can't be changed in an update.
Product2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Product2 associated with this OrderItem.
Quantity	**Type** double **Properties** Create, Filter, Sort, Update **Description** Number of units of this order product.
QuoteLineItemId	**Type** reference **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description ID of the associated quote line item. If this field is specified, the quote line item's QuoteId must match the QuoteId for the order product's parent order.
`ServiceDate`	**Type** date **Properties** Create, Filter, Nillable, Sort, Update **Description** Start date for the order product. Label is **Start Date**.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Unit price for the order product.

Usage

An order can have associated order product records only if the order has a price book associated with it. An order product must correspond to a product that is listed in the order's price book.

SEE ALSO:
- OrderItemFeed
- OrderItemHistory
- Order

OrderItemFeed

Represents a single feed item in the feed displayed on the detail page for an order product record.

An order product feed shows changes to an order product for fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to order products in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if Type is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets Type to ContentPost.
`ContentSize`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read-only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read-only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then `InsertedById` is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines.

Field Name	Details
	• `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. NetworkScope can have the following values:

Field Name	Details
	• `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** string **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `TypeContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the Type is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description The type of FeedItem: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval. • BasicTemplateFeedItem—Not used. • CanvasPost—a post made by a canvas app posted on a feed. • CollaborationGroupCreated—generated when a user creates a public group. • CollaborationGroupUnarchived—Not used. • ContentPost—a post with an attached file. • CreatedRecordEvent—generated when a user creates a record from the publisher. • DashboardComponentAlert—generated when a dashboard metric or gauge exceeds a user-defined threshold. • DashboardComponentSnapshot—created when a user posts a dashboard snapshot on a feed. • LinkPost—a post with an attached URL. • PollPost—a poll posted on a feed. • ProfileSkillPost—generated when a skill is added to a user's Chatter profile. • QuestionPost—generated when a user posts a question. • ReplyPost—generated when Chatter Answers posts a reply. • RypplePost—generated when a user creates a Thanks badge in Work.com. • TextPost—a direct text entry on a feed. • TrackedChange—a change or group of changes to a tracked field. • UserStatus—automatically generated when a user adds a post. Deprecated. The following values appear in the Type picklist for all feed objects but apply only to CaseFeed:

Field Name	Details
	• `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for an order product record.

SEE ALSO:

OrderItem

OrderItemHistory

Represents the history of changes to the values in the fields of an order product.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`OrderItemId`	**Type** reference

Field Name	Details
	Properties Group, Sort **Description** ID of the order product. Label is **Order Product ID**.

Usage

Use this object to identify changes to an order product.

This object respects field-level security on the parent object.

SEE ALSO:

OrderItem

OrderOwnerSharingRule

Represents a rule which determines order sharing access for the order's owners.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CreatedById`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the creator of the order owner sharing rule.

Field	Details
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date when the order owner sharing rule was created.
Description	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the order owner sharing rule. Maximum length is 1,000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the developer of the order owner sharing rule.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the group whose orders are shared.
Id	**Type** ID **Properties** Defaulted on create, Filter, Group, idLookup, Sort **Description** ID of the order owner sharing rule.
LastModifiedById	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the user who last modified the order owner sharing rule.

Field	Details
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date when the order owner sharing rule was last modified.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Namefield, Sort, Update **Description** Name of the order owner sharing rule. Maximum length is 80 characters.
OrderAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Access level for the order owner sharing rule.
SystemModstamp	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** System modification time for the order owner sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group with whom order access is shared.

Usage

Use this object to manage the sharing rules for orders. For example, the following code creates an order owner sharing rule between two public groups, which can also contain portal users.

```
OrderOwnerSharingRule rule = new OrderOwnerSharingRule();
rule.setName("RuleName"); // Set the sharing rule name
```

```
rule.setDeveloperName("RuleDeveloperName"); // Set the sharing rule developer name
rule.setGroupId("00Gx00000000000"); // Set the group of users to share records from
rule.setUserOrGroupId("00Gx00000000001"); // Set the group of users to share records to
rule.setOrderAccessLevel("Edit");
connection.create(rule);
```

SEE ALSO:

Metadata API Developer Guide: SharingRules

Organization

Represents key configuration information for an organization.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), update()

Executing a SOQL SELECT query returns the value of fields in this object, but no value is visible for some of the fields.

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
Address (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
AllowsSelfServiceLogin	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether the organization allows Self-Service login (true) or not (false).
City	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort, Update **Description** Name of the city for the organization's address.
ComplianceBccEmail	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** Email address for compliance blind carbon copies. Limit: 80 characters.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the country for the organization's address. Limit: 80 characters.
CountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the organization's address.
DailyWebToCaseCount	**Type** int **Properties** Filter, Nillable **Description** The number of web form submissions that have been converted to cases for the day.
DailyWebToCaseLimit	**Type** int **Properties** Filter, Nillable

Field	Details
	Description The maximum number of web form submissions that can be converted to cases per day.
`DailyWebToLeadCount`	**Type** int **Properties** Filter, Nillable **Description** The number of web form submission that have been converted to leads for the day
`DailyWebToLeadLimit`	**Type** int **Properties** Filter, Nillable **Description** The maximum number of web form submissions that can be converted to leads per day.
`DefaultAccountAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** In API version 10.0 and later, represents the default access level for accounts, contracts, and assets. The possible values are: • `None` • `Read` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign` In versions before 10.0, `DefaultAccountAndContactAccess` represented this value.
`DefaultAccountAndContactAccess`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist

Field	Details
	Description Default access level for accounts, contacts, contracts, and assets. This field is supported for backward compatibility only and is not available in API version 10.0 or later. In version 10.0 and later, use either `DefaultAccountAccess` or `DefaultContactAccess`.
`DefaultCalendarAccess`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for calendars. The possible values are listed, followed by the user interface labels in parentheses: • `HideDetails` (Hide Details) • `HideDetailsInsert` (Hide Details and Add Events) • `ShowDetails` (Show Details) • `ShowDetailsInsert` (Show Details and Add Events) • `AllowEdits` (Full Access)
`DefaultCampaignAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for campaigns. The possible values are: • `None` • `Read` • `Edit` • `All`
`DefaultCaseAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for cases. The possible values are: • `None` • `Read` • `Edit` • `ReadEditTransfer`

Field	Details
DefaultContactAccess	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for contacts. The possible values are: • `None` • `Read` • `Edit` • `ControlledByParent` In versions before 10.0, `DefaultAccountAndContactAccess` represented this value. Note: When `DefaultContactAccess` is set to "Controlled by Parent," you can't update the `ContactAccessLevel` field.
DefaultLeadAccess	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for leads. The possible values are: • `NoneRead` • `Edit` • `ReadEditTransfer`
DefaultLocaleSidKey	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** Default locale SID key.
DefaultOpportunityAccess	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for opportunities. The possible values are:

Field	Details
	• `None` • `Read` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign`
`DefaultPricebookAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Default access level for price books. The possible values are listed, followed by the user interface labels in parentheses: • `None` (No access) • `Read` (Read only) • `ReadSelect` (Use)
`DefaultTerritoryAccountAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for accounts in territories. The possible values are: • `Read` • `Edit` • `All`
`DefaultTerritoryCaseAccess`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for cases associated with accounts in territories. The possible values are: • `None` • `Read` • `Edit` • `ControlledByLeadOrContact` • `ControlledByCampaign`

Field	Details
DefaultTerritoryContactAccess	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for contacts associated with accounts in territories. The possible values are: • NoneRead • Edit • ControlledByLeadOrContact • ControlledByCampaign Note: When DefaultContactAccess is set to "Controlled by Parent" you can't update this field.
DefaultTerritoryOppAccess	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Default access level for opportunities in territories. Valid values: • NoneRead • Edit • ControlledByLeadOrContact • ControlledByCampaign
Division	**Type** string **Properties** Filter, Nillable, Update **Description** The name of the division for this organization. This field is not related to the Division object.
Fax	**Type** phone **Properties** Filter, Group, Nillable, Sort, Update **Description** Fax number. Limit: 40 characters.

Field	Details
FiscalYearStartMonth	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number that corresponds to the month that this organization's fiscal year starts.
HomepageHtml	**Type** textarea **Properties** Nillable, Update **Description** The Home tab custom links and company message for this organization.
InstanceName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Read-only. The name of the instance. Available in API version 31.0 or later.
IsSandbox	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the current organization is a sandbox (`true`) or production (`false`) instance. Available in API version 31.0 or later.
LanguageLocaleKey	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** The same as `Language`, the two-to-five character code which represents the language and locale ISO code. This controls the language for labels displayed in an application.

Field	Details
LastWebToCaseDate	**Type** dateTime **Properties** Filter, Nillable **Description** The last date that a web form submission was converted to a case.
LastWebToLeadDate	**Type** dateTime **Properties** Filter, Nillable **Description** The last date that a web form submission was converted to a lead.
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
MaxActionsPerRule	**Type** int **Properties** Filter, Nillable **Description** Maximum number of actions per workflow, assignment, escalation, and auto-response rules. This field is unavailable in version 15.0 and later.

Field	Details
MaxRulesPerEntity	**Type** int **Properties** Filter, Nillable **Description** Maximum number of rules per object, inclusive of workflow, assignment, escalation, and auto-response rules. This field is unavailable in version 15.0 and later.
MonthlyPageViewsEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views allowed for the current calendar month for the sites in your organization. To access this field, Salesforce Sites must be enabled for your organization. This field is generally available in API versions 18.0 and later.
MonthlyPageViewsUsed	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views used in the current calendar month for the sites in your organization. To access this field, Salesforce Sites must be enabled for your organization. This field is generally available in API versions 18.0 and later.
Name	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the organization.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`OrganizationType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Edition of the organization, for example Enterprise Edition or Unlimited Edition.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort, Update **Description** Phone number for the organization.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Postal code for the address of the organization. Limit: 20 characters.
`PreferencesAutoSelectIndividualOnMerge`	**Type** boolean

Field	Details
	Properties Filter, Update
PreferencesEventScheduler	**Type** boolean **Properties** Update **Description** Indicates whether opportunities require products (`true`) or not (`false`).
PreferencesRequireOpportunityProducts	**Type** boolean **Properties** Filter, Update **Description** Indicates whether opportunities require products (`true`) or not (`false`).
PreferencesS1BrowserEnabled	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the Salesforce mobile web is enabled for all users in your organization (`true`) or is disabled for all users (`false`). This field is available in API version 29.0 or later.
PreferencesTerminateOldestSession	**Type** boolean **Properties** Filter, Update **Description** Indicates whether the oldest login session is automatically closed when a policy specifying the maximum number of sessions is triggered. This field is available in API version 35.0 or later.
PreferencesTransactionSecurityPolicy	**Type** boolean **Properties** Filter, Update

Field	Details
	Description Indicates whether the Transaction Security feature has been enabled. This field is available in API version 35.0 or later.
`PrimaryContact`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Name of the primary contact for the organization. Limit: 80 characters.
`ReceivesAdminInfoEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the organization receives administrator emails (`true`) or not (`false`).
`ReceivesInfoEmails`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the organization receives informational email from Salesforce (`true`) or not (`false`).
`SelfServiceCasePlural`	**Type** string **Properties** Filter, Nillable, Update **Description** The plural version of the term used to represent the Case object in the Self-Service portal.
`SelfServiceCaseSingle`	**Type** string **Properties** Filter, Nillable, Update

Field	Details
	Description The singular version of the term used to represent the Case object in the Self-Service portal.
`SelfServiceCaseSubmitRecordTypeId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the record type associated with a case submitted via the Self-Service portal.
`SelfServicDefaultCaseOrigin`	**Type** string **Properties** Filter, Nillable, Update **Description** The default origin of a case submitted via the Self-Service portal.
`SelfServiceEmailSenderAddress`	**Type** email **Properties** Filter, Nillable, Update **Description** The Self-Service email address from which new Self-Service user and password email messages are sent, such as `support@acme.com`.
`SelfServiceEmailSenderName`	**Type** string **Properties** Filter, Nillable, Update **Description** The name associated with the email address in the `SelfServiceEmailSenderAddress` field, such as `Acme Customer Support`.
`SelfServiceEmailUserOnCaseCreationTemplateId`	**Type** reference **Properties** Filter, Nillable, Update

Field	Details
	Description The ID of the email template used when email is sent to a Self-Service user when he or she creates a case.
SelfServiceEnabledForResponseRules	**Type** boolean **Properties** Filter, Nillable, Update **Description** Indicates whether the Self-Service portal is enabled for auto-response rules (`true`) or not (`false`).
SelfServiceFeatureConfig	**Type** int **Properties** Filter, Nillable, Update **Description** An integer representing the active Self-Service feature configuration for this organization.
SelfServiceLogoutUrl	**Type** url **Properties** Filter, Nillable, Update **Description** The Web page that displays when a Self-Service user logs out of the Self-Service portal.
SelfServiceMaxNumSuggestions	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum number of suggested solutions allowed for a Self-Service case.
SelfServiceNewCommentCheckedByDefault	**Type** boolean **Properties** Defaulted on create, Filter, Update

Field	Details
	Description If `true`, When a customer notification is automatically sent when a new comment is added to a case.
`SelfServiceNewCommentTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used to send a notification to Self-Service users when a public comment is added to one of their cases.
`SelfServiceNewPassTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when new passwords are generated for Self-Service users.
`SelfServiceNewUserTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when new Self-Service users are enabled.
`SelfServicePageHeight`	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum height in pixels of Self-Service pages.
`SelfServicePageWidth`	**Type** int **Properties** Filter, Nillable, Update **Description** The maximum width in pixels of Self-Service pages.

Field	Details
SelfServiceSelfClosedCaseStatus	**Type** picklist **Properties** Filter, Nillable, Update **Description** The default status for cases closed by Self-Service users.
SelfServiceSolutionCategoryAvailable	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether solution categories are available in the Self-Service portal (`true`) or not (`false`).
SelfServiceSolutionCategoryStartNodeId	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the top-level category in the Self-Service portal.
SelfServiceSolutionPlural	**Type** string **Properties** Filter, Nillable, Update **Description** The plural version of the term used to represent the Solution object in the Self-Service portal.
SelfServiceSolutionSingle	**Type** string **Properties** Filter, Nillable, Update **Description** The singular version of the term used to represent the Solution object in the Self-Service portal.
SelfServiceStyleSheetUrl	**Type** url **Properties** Filter, Nillable, Update

Field	Details
	Description The public URL of your organization's Self-Service portal stylesheet.
SelfServiceWelcomePageConfig	**Type** int **Properties** Filter, Nillable, Update **Description** Integer that represents the welcome page configuration for the Self-Service portal.
SelfServiceWelcomeText	**Type** string **Properties** Filter, Nillable, Update **Description** The custom welcome message displayed at the top of the Self-Service home page when Self-Service users log in. Limit: 32,000 characters.
SignupCountryIsoCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ISO country code specified by the user for a sign-up request.
State	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** State of the address of the organization. Limit: 80 characters.
StateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the organization's address.

Field	Details
Street	**Type** textarea **Properties** Filter, Group, Nillable, Sort, Update **Description** Street address for the organization. Limit: 255 characters.
TrialExpirationDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date that this organization's trial license expires.
TimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Identifies the default time zone of the organization.
UiSkin	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The user interface theme selected for the organization.
UsesStartDateAsFiscalYearName	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the calendar year when the fiscal year begins is referred to as the year of the company's fiscal year (`true`) or not (`false`). For example, if the fiscal year begins in February 2006, a `true` value means the fiscal year is FY2006, and a `false` value means the fiscal year is FY2007.
UsesWebToCase	**Type** boolean

Field	Details
	Properties Filter, Nillable, Update **Description** Indicates whether this organization can use Web-to-Case (`true`) or not (`false`).
`UsesWebToLead`	**Type** boolean **Properties** Filter, Nillable, Update **Description** Indicates whether this organization can use Web-to-Lead (`true`) or not (`false`).
`WebToCaseAssignedEmailTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when a new case is assigned to a user via Web-to-Case.
`WebToCaseCreatedEmailTemplateId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the email template used when a new case is created via Web-to-Case.
`WebToCaseDefaultCreatorId`	**Type** reference **Properties** Filter, Nillable, Update **Description** The ID of the user specified as the default creator of cases created via Web-to-Case.
`WebToCaseDefaultOrigin`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update

Field	Details
	Description The default value for the **Case Origin** field on cases submitted via Web-to-Case. Limit: 40 characters.

Usage

Query this object to obtain information about an organization's settings. Only one organization object exists per organization.

SEE ALSO:

Object Basics

OrgDeleteRequest

Represents a request to delete a developer edition (DE) org. This object is available in API version 42.0 and later. It is available only in Developer and Database.com editions.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated ID of this OrgDeleteRequest object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The ID of the user who initiated the org delete request.
`RequestType`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort **Description** Specifies whether you want to deactivate or reactivate the org. When you deactivate an org, you have 30 days to change your mind and reactivate it. After 30 days, the org is locked, and you must contact Salesforce Customer Support to reactivate it. After 60 days, the org is permanently deleted from Salesforce servers. Valid values: • `Deactivate` • `Reactivate`

OrgWideEmailAddress

Represents an organization-wide email address for user profiles.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Address`	**Type** email **Properties** Create, Filter, Sort, Update **Description** The organization-wide email address.
`IsAllowAllProfiles`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, any user profile in your organization can use this object. If `false`, only specified user profiles can use this object when sending email. If you do not have the appropriate user profile, you can't use this object.

Field	Details
`DisplayName`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The name that is used to identify the sender of the email.

Usage

This object represents an email alias for user profiles. You can pass in the ID to an OrgWideEmailAddress record when calling `sendEmail()` for a SingleEmailMessage.

OutOfOffice

Represents a user-set value on a profile that shows when the user intends to be out of the office. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `undelete()`, `upsert()`, `update()`

Special Access Rules

In Lightning Experience, lets users set a message next to their name in Chatter to show when they plan to be out of the office. The message appears in Lightning Experience, Salesforce Classic, and mobile views. Messages expire automatically after their end date. You can control whether out-of-office functionality is available to your users. Set it up in the Out of Office section in **Setup** > **Chatter Settings**.

Only internal users can set an out-of-office message.

Fields

Field Name	Details
`EndDate`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date of the last day a person is out of the office. After the message expires, it goes away automatically.

Field Name	Details
IsEnabled	**Type** boolean **Properties** Create, Defaulted on create **Description** Indicates whether an out-of-office message can be displayed for a user. The default value is `true`.
Message	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The message portion of the out-of-office message. This text, along with start and end dates, is appended to the user's name in the Salesforce user interface. The maximum length of this string is 40 characters.
StartDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date of the first day a person is out of the office.
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user associated with the out-of-office message.

Usage

- Maximum message length is 40 characters.
- Users can set only their own out-of-office message. An admin can set an out-of-office message for any user.
- The out-of-office message can be set only for internal users.

OwnedContentDocument

Represents a file owned by a user. This object is available in version 30.0 and later.

Supported Calls

`describeSObjects()`

Fields

Field Name	Details
`ContentDocumentId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the document.
`ContentSize`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Size of the document in bytes.
`ContentUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** URL for links and Google Docs. This field is set only for links and Google Docs, and is one of the fields that determine the `FileType`. This field is available in API version 31.0 and later.
`ExternalDataSourceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 32.0 and later.
`ExternalDataSourceType`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Type of external data source in which the document is stored. This field is set only for external documents that are connected to Salesforce. This field is available in API version 35.0 and later.
FileExtension	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** File extension of the document. This field is available in API version 31.0 and later.
FileType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Type of document, determined by the file extension.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the owner of the document.
Title	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** Title of the document.

PackageLicense

Represents a license for an installed managed package. This object is available in API version 31.0 and later.

Supported Calls

`query()`, `retrieve()`

Fields

Field Name	Details
`AllowedLicenses`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of users allowed to use the package.
`ExpirationDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the package license expires.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Sort **Description** The namespace prefix associated with the package.
`Status`	**Type** picklist **Properties** Filter, Group, Sort **Description** The status of the license. Possible values are: `Active`, `Expired`, `Free`, and `Trial`.
`UsedLicenses`	**Type** int **Properties** Create, Filter, Nillable, Sort **Description** The number of users who have a license to the package.

Usage

Use this object to determine the number of licenses allowed and in use for a managed package installed in your organization.

The following example demonstrates the use of the API to manage licenses for a package. The example defines an Apex class that does the following.

- Retrieves the PackageLicense record for the specified package (identified by its namespace prefix).
- Defines a function that returns a list of all users with the specified profile.
- Creates a UserPackageLicense record for each user with that profile, which has the effect of assigning a license for the package to all users with that profile.
- Returns an error message if the number of users exceeds the number of available licenses.

```
public class AssignPackageLicense {

    static String PACKAGE_NAMESPACE_PREFIX = 'acme_101';
    static String PROFILE_ID = '00exx000000jz1SAAQ';
    public static String exceptionText {get; set;}

    public AssignPackageLicense() {
         exceptionText = 'Initialized';
    }

   static List<User> getUsersWithProfile(){
      String userQuery = 'SELECT Id FROM User WHERE ProfileId = :PROFILE_ID';
      List<User> matchingUsers = new List<User>();
      matchingUsers = [SELECT Id FROM User WHERE ProfileId = :PROFILE_ID];
      return matchingUsers;
    }

    public static void assignLicenseByProfile() {
        //find the PackageLicense Id
        PackageLicense pl = [SELECT Id, NamespacePrefix, AllowedLicenses, UsedLicenses,
              ExpirationDate,Status FROM PackageLicense WHERE
              NamespacePrefix = :PACKAGE_NAMESPACE_PREFIX];
        System.assert(pl != null, 'PackageLicense cannot be null.');
        List<User> usersToAssignLicenses = getUsersWithProfile();
        List<UserPackageLicense> firstUPLs = new List<UserPackageLicense>();

        //create a new UserPackageLicense record for each user with the specified profile

        for (Integer i = 0; i< usersToAssignLicenses.size(); i++){
              UserPackageLicense upl = new UserPackageLicense();
              upl.PackageLicenseId = pl.Id;
              upl.UserId = usersToAssignLicenses[i].Id;
              firstUPLs.add(upl);
        }

        try {
          //bulk insert
          insert(firstUPLs);
          } catch(DmlException e) {
              for (Integer i = 0; i < e.getNumDml(); i++) {
              // process exception here
```

```
                System.debug(e.getDmlMessage(i));
                String status = e.getDmlStatusCode(i);
                System.debug(status + ' ' + e.getDmlMessage(i));
                if(status.equals('LICENSE_LIMIT_EXCEEDED')){
                 exceptionText = 'You tried to assign more licenses than available. '
                 +' You tried to create '+ firstUPLs.size()+' licenses but only have '
                 + (pl.AllowedLicenses - pl.UsedLicenses) + ' licenses free.';
                 System.debug(exceptionText);
                }
              }
          }
     }
}
```

PackagePushError

Represents an error encountered during a push request. The number of PackagePushError records created depends on the number of push jobs in the request that result in an error.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ErrorDetails`	**Type** string **Properties** Nillable, Sort **Description** Explanation of the error.
`ErrorMessage`	**Type** string **Properties** Nillable, Sort **Description** The error code that appears in the API.
`ErrorSeverity`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description Valid values are: • Error • Warning
`ErrorTitle`	**Type** string **Properties** Nillable, Sort **Description** The error message title that appears in the API.
`ErrorType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • ApexTestFailure • DeployError • FeatureMissing • IneligibleUpgrade • LimitExceeded • LockingFailure • PACError • UnclassifiedError
`PackagePushJobId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. The parent push job record ID.

Usage

Suppose that your push upgrade request wasn't successful due to some of its jobs failing. Let's write some code to find out what those errors were.

This code sample uses the Web Services Connector (WSC).

```
// Retrieves all PackagePushError objects associated with the PackagePushJob with the given
// ID
final String PACKAGE_PUSH_ERROR_QUERY = "Select ErrorMessage, ErrorDetails, ErrorTitle,"

+ " ErrorSeverity, ErrorType from PackagePushError where PackagePushJobId = '%s'";

// job is a PackagePushJob instance
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_ERROR_QUERY, job.getId()));

StringBuilder errorMessages = new StringBuilder();
errorMessages.append("Errors for PackagePushJob [").append(job.getId()).append("]:")
 .append("\n");

// There can be multiple PackagePushErrors for a given PackagePushJob
for(SObject r : queryResult.getRecords()) {
 PackagePushError e = (PackagePushError) r;
 errorMessages.append("Title: ").append(e.getErrorTitle()).append("\n");
 errorMessages.append("Severity: ").append(e.getErrorSeverity()).append("\n");
 errorMessages.append("Type: ").append(e.getErrorType()).append("\n");
 errorMessages.append("Message: ").append(e.getErrorMessage()).append("\n");
 errorMessages.append("Details: ").append(e.getErrorDetails()).append("\n");
 errorMessages.append("\n");
}

String errors errorMessages.toString();
```

PackagePushJob

Represents an individual push job for upgrading a package in an org from one version to another version. There can be multiple push jobs created for one push request. For example, if you want to upgrade five orgs as part of one push, you have one PackagePushRequest record and five PackagePushJob records.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`PackagePushRequestId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The ID of the parent push request record which must have been created.

Field Name	Details
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the job. Valid values are: • Canceled • Created (default) • Failed • In Progress • Pending • Succeeded Don't specify this value when you create the push job. The default value of `Created` is used.
SubscriberOrganizationKey	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The organization key of the org where the package is upgraded. This references `orgKey` in PackageSubscriber.

Usage

Suppose that you want to push version 3.4.6 of your package to all orgs. You've already identified the orgs eligible for the upgrade by using MetadataPackageVersion and created the push request using PackagePushRequest. Now let's write some code to create a push job for each eligible org.

This code sample uses the Web Services Connector (WSC).

```
PackageSubscriber[] subscribers = new PackageSubscriber[];

// ... populate eligible and desired subscribers

// Create the PackagePushJob array
PackagePushJob[] jobs = new PackagePushJob[subscribers.length];

for (int i = 0; i < subscribers.length; i++) {
 // create a job for each subscriber...
 PackagePushJob job = new PackagePushJob();
 // ... associate it to the PackagePushRequest ppr...
 job.setPackagePushRequestId(ppr.getId());
 // ... and add the orgKey
```

```
 job.setSubscriberOrganizationKey(subscribers[i].getOrgKey());
 jobs[i] = job;
}

// Save the jobs
SaveResult[] saveResults = conn.create(jobs);

// Add the newly generated id's to the PackagePushJob objects
for (int i = 0; i < saveResults.length; i++) {
 if (saveResults[i].isSuccess()) {
  jobs[i].setId(saveResults[i].getId());
 }
}
```

Or, if you're using REST API, submit a POST request to the PackagePushJob sObject endpoint, as in the following example. SOAP API is also supported. This example returns the push job ID (starting with 0DX) that is required to query the status of the job.

```
POST
/services/data/v38.0/sobjects/packagepushjob/
{
   "PackagePushRequestId" : "0DV...",
   "SubscriberOrganizationKey" : "00DR00..."
}
```

Checking the Status of a Push Job

To check the job status, simply query the `Status` field. For example:

```
SELECT Id, Status FROM PackagePushJob WHERE PackagePushRequestId ='0DV...'
```

Here's an example in Java.

```
// Finds the status of the PackagePushJob with the given id
String PACKAGE_PUSH_JOB_STATUS_QUERY = "Select status from PackagePushJob where Id = '%s'";

// job is a PackagePushJob instance
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_JOB_STATUS_QUERY,
job.getId()));

// extract the status from the QueryResult
String status = ((PackagePushJob) queryResult.getRecords()[0]).getStatus();

// optionally, update the PackagePushJob instance with the latest status
job.setStatus(status);
```

You can also continuously poll the job status until the job is done. The following Java example polls the status every 10 seconds.

```
// The set of states that indicate a PackagePushJob has completed
final Set<String> TERMINAL_STATES = new HashSet<>();
TERMINAL_STATES.add("Succeeded");
TERMINAL_STATES.add("Failed");
TERMINAL_STATES.add("Canceled");

String status = queryJobStatus(job); // this method returns the status as retrieved in the
 previous code sample

// If the status is not one of the completed statuses...
```

```
while(!TERMINAL_STATES.contains(status)) {
 Thread.sleep(10 * 1000); // ... wait 10 seconds and try again
 status = queryJobStatus(job);
}
```

PackagePushRequest

Represents the push request for upgrading a package in one or many orgs from one version to another version.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`PackageVersionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The non-beta, non-deprecated package version that the package is being upgraded to.
`ScheduledStartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time (UTC) at which the push request is processed, in ISO 8601 format. Set this value to the earliest time that you want Salesforce to attempt to start the push. As a best practice, schedule pushes at off-peak hours like 1:00 AM Saturday. If you don't specify a value, the push starts when the package push request's Status is set to `Pending`.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The status of the push. Valid values are: • Canceled • Created (default)

Field Name	Details
	• Failed • In Progress • Pending • Succeeded Don't specify this value when you create the push request. The default value of Created is used. Later, change the status to Pending to schedule the push upgrade.

Usage

Suppose that you want to push version 3.4.6 of your package to all orgs. You've already identified the orgs eligible for the upgrade by using MetadataPackageVersion. Now let's write some code to create a push request, which holds a push job for each eligible org.

This code sample uses the Web Services Connector (WSC).

```
// Create a new PackagePushRequest for the versionId to upgrade to
// (for example, versionId is the "04t..." id of version
// 3.4.6 of the package
PackagePushRequest ppr = new PackagePushRequest();
ppr.setPackageVersionId(versionId);

// Optionally, set the start time of the PackagePushRequest to schedule it to begin
// automatically; scheduledStartTime is a java.util.Calendar instance
ppr.setScheduledStartTime(scheduledStartTime);

// Save the PackagePushRequest
SaveResult[] saveResults = conn.create(new SObject[] { ppr });
if (saveResults[0].isSuccess()) {
 // Add the newly generated Id to the object
 ppr.setId(saveResults[0].getId());
} else {
 for (Error error : saveResults[0].getErrors()) {
  System.out.println(error.getMessage());
 }
}
```

Or, if you're using REST API, submit a POST request to the PackagePushRequest sObject endpoint, as in the following example. SOAP API is also supported.

This example returns the push request ID (starting with 0DV) that's required to create push jobs.

```
POST
/services/data/v38.0/sobjects/packagepushrequest/
{
   "PackageVersionId" : "04t...",
   "ScheduledStartTime" : "2016-08-24T21:00:00"
}
```

As your next step, create a push job for each eligible subscriber you want to upgrade using PackagePushJob.

Scheduling the Push Upgrade

To signal that the push upgrade is ready to be processed, change the status of the push request to Pending. If you didn't set a `ScheduledStartTime`, the push upgrade starts immediately after you change the status.

See the following Java example.

```
// ppr is the PackagePushRequest instance
ppr.setStatus("Pending");
conn.update(new SObject[] { ppr });
```

If you're using REST API, submit a PATCH request to the PackagePushRequest sObject endpoint, as in the following example. SOAP API is also supported.

```
PATCH
/services/data/v38.0/sobjects/packagepushrequest/0DV...
{
   "Status" : "Pending"
}
```

Checking the Status of a Push Request

The PackagePushRequest status is `Succeeded` if all its associated jobs are successful; it's `Failed` if at least one job failed.

```
// Finds the status of the PackagePushRequest for a given Id
final String PACKAGE_PUSH_REQUEST_STATUS_QUERY = "Select status from PackagePushRequest"
+
 " where Id = '%s'";

// ppr is a PackagePushRequest instance
QueryResult queryResult = conn.query(String.format(PACKAGE_PUSH_REQUEST_STATUS_QUERY,
 ppr.getId()));

// extract the status from the QueryResult
String status = ((PackagePushRequest) queryResult.getRecords()[0]).getStatus();

// optionally, update the PackagePushRequest instance with the latest status
ppr.setStatus(status);
```

You can also check the status of a job by querying the PackagePushJob's `Status` field.

Aborting a Push Request

You can abort a package push request by changing its status to Canceled.

For example, if you're using the REST API, submit a PATCH request to the PackagePushRequest sObject endpoint.

```
PATCH
/services/data/v38.0/sobjects/packagepushrequest/0DV...
{
   "Status" : "Canceled"
}
```

The following example is for Java.

```
// ppr is the PackagePushRequest instance
ppr.setStatus("Canceled");
```

You can abort a package push request only if its status is Created or Pending. If the abort succeeds, all associated push jobs are also canceled. If you try to abort when the current PackagePushRequest status is Canceled, Succeeded, Failed, or In Progress, the abort does not occur, and an error message is returned.

PackageSubscriber

Represents an installation of a package in an org. This object contains installation information for managed packages developed in the org you're logged in to.

One record is created per installation. For example, if 5 orgs installed 2 packages, 10 records are created.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`InstalledStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the package is installed in the org, the value is `i`.
`InstanceName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The instance that hosts the subscriber org.
`MetadataPackageVersionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character package version ID starting with `04t`.
`OrgKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID that represents the Salesforce org.

Field Name	Details
OrgName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the org where the package is installed.
OrgStatus	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • Active • Demo • Free • Inactive • Trial Orgs with an OrgStatus of Inactive can't receive push upgrades.
OrgType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Valid values are: • Production • Sandbox

Usage

Here are examples of the types of API queries you can perform.

Query	String
Get all package subscriber orgs with a specific package ID	`SELECT Id, OrgKey, OrgStatus, OrgName, OrgType FROM PackageSubscriber WHERE MetadataPackageVersionId = '04t...'`

Query	String
Get all package subscriber orgs that have an installed package created by the org you're logged in to	`SELECT Id, OrgKey, OrgStatus, OrgName, OrgType FROM PackageSubscriber WHERE InstalledStatus = 'i'`

Filter PackageSubscriber Objects by Instance

If you have packages with many subscribers, querying PackageSubscriber objects can take a while. To improve query performance, add filters to your PackageSubscriber queries, such as an `InstanceName` filter. `InstanceName` is a field that represents the instance that the subscriber org is hosted on.

1. Get the org's managed package and the latest released version of the package.

```
/**
* Get the MetadataPackage object corresponding to this org's managed package
*/
public MetadataPackage getMetadataPackage() throws ConnectionException {
 // retrieve the managed package, which won't have an empty namespace
 QueryResult result = conn.query("select id from  MetadataPackage where namespaceprefix
 <> ''");

 return (MetadataPackage) result.getRecords()[0];
}

/**
* Get the latest MetadataPackageVersion object of the given MetadataPackage
*/
public MetadataPackageVersion getLatestMetadataPackageVersion(MetadataPackage
metadataPackage)
throws ConnectionException {
 // get the latest released version of the given package
 String query = "Select id, ReleaseState, MajorVersion, MinorVersion, PatchVersion,
MetadataPackageId"
  + " From MetadataPackageVersion"
  + " Where MetadataPackageId = '%s' and ReleaseState = 'Released'"
  + " Order by majorversion desc, minorversion desc, patchversion desc";

 QueryResult result = conn.query(String.format(query, metadataPackage.getId()));

 return (MetadataPackageVersion) result.getRecords()[0];
}
```

2. Get eligible subscribers. The following query strings and methods are modified to allow querying for PackageSubscribers filtered by an instance.

```
static final String PACKAGE_SUBSCRIBER_ORG_KEY_QUERY = "Select OrgKey from
PackageSubscribers where OrgStatus = 'Active'"
 + " and InstalledStatus = 'I'"
 + " and InstanceName = '%s'"; // placeholder for instance values

static final String METADATA_PACKAGE_VERSION_QUERY = "Select Id, Name, ReleaseState,
(%s) from MetadataPackageVersion"
 + " where MetadataPackageId = '%s' AND ReleaseState = 'Released'"
```

```
 + " AND (MajorVersion < %s OR (MajorVersion = %s and MinorVersion < %s)"
 + " OR (MajorVersion = %s and MinorVersion = %s and PatchVersion < %s))";

/**
* Get all PackageSubscribers on the given instance that are eligible to upgrade to the
 given
* MetadataPackageVersion
*/
public PackageSubscriber[] getEligibleSubscriberIds(MetadataPackageVersion version,
String instanceName) throws ConnectionException {
 String allPackageId = version.getMetadataPackageId();
 Integer major = version.getMajorVersion();
 Integer minor = version.getMinorVersion();
 Integer patch = version.getPatchVersion();

 return getEligibleSubscriberIds(major, minor, patch, allPackageId, instanceName);
}
```

```
public PackageSubscriber[] getEligibleSubscriberIds(Integer major, Integer minor, Integer
 patch, String packageId, String instanceName) throws ConnectionException {
 String subscriberQuery = String.format(PACKAGE_SUBSCRIBER_ORG_KEY_QUERY, instanceName);
QueryResult results = conn.query(String.format(METADATA_PACKAGE_VERSION_QUERY,
subscriberQuery, packageId, major, major, minor, major, minor, patch));

 return Arrays.stream(results.getRecords()).map(MetadataPackageVersion.class::cast)
  .filter(mpv -> mpv.getPackageSubscribers() != null)
  .flatMap(mpv -> Arrays.stream(mpv.getPackageSubscribers().getRecords()))
  .map(PackageSubscriber.class::cast)
  .toArray(PackageSubscriber[]::new);
}
```

3. Put it all together. The following code sample shows how to use the previous methods to modify the workflow to perform package pushes by instance.

```
String[] instances = { "NA4" }; // Here we list the instances we would like to push to
MetadataPackage metadataPackage = api.getMetadataPackage();
MetadataPackageVersion version = api.getLatestMetadataPackageVersion(metadataPackage);

// do pushes by instance to avoid API timeouts retrieving PackageSubscribers
for (String instanceName : instances) {
PackageSubscriber[] eligibleSubscribers = api.getEligibleSubscriberIds(version,
instanceName);

// ... proceed with creating PushRequests and PushJobs as before
```

Partner

Represents a partner relationship between two Account records or between an Opportunity and an Account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- You must have the "View All Data" permission to access this object via the API. All of the Partner fields are accessible in the `describeSObjects()` and `query()` calls. You cannot `update()` or `upsert()` partners via the API.
- Customer Portal users can't access this object.

Fields

Field	Details
`AccountFromId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `OpportunityId` is null. ID of the main Account in a partner relationship between two accounts. Specifying this field when creating a Partner record creates two AccountPartner objects, one for each direction of the relationship. If you specify the `OpportunityId` field, you can't specify this field as well.
`AccountToId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Partner Account related to either an opportunity or an account. You must specify this field when creating an opportunity Partner or an Account Partner.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsPrimary`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Valid for Opportunity Partners only. Indicates that the account is the primary partner for the opportunity. Only one account can be marked as primary for an opportunity. If you set this field to 1 (`true`) upon insert of a

Field	Details
	new opportunity partner, any other primary partners for that opportunity will automatically have this field set to 0 (`false`). Label is **Primary**.
`OpportunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Required if `AccountFromId` is null. ID of the Opportunity in a partner relationship between an Account and an Opportunity. Specifying this field when creating a record creates an OpportunityPartner. If you specify the `AccountFromId` field, you can't specify this field as well.
`Role`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, **Description** UserRole that the account has towards the related opportunity or account, such as consultant or distributor.

Roles

In the Salesforce user interface, system administrators can set up the valid role values and their corresponding reverse role values in the PartnerRole object. Each account in the relationship is assigned a `Role` (such as `Consultant` or `Distributor`) designating that account's role towards the related account or opportunity.

Creating an Account-Opportunity Partner Relationship

When you create a partner relationship between an account and an opportunity (when you create a Partner object and specify the `OpportunityId` field), the API automatically creates an OpportunityPartner with the corresponding values:

- The value of the Partner field `AccountToId` maps to the value of the OpportunityPartner field `AccountToId`.
- The values of the `OpportunityId`, `Role`, and `IsPrimary` fields in both objects are the same.
- If you set the `IsPrimary` value to 1 (`true`) upon insert of a new OpportunityPartner, any other existing primary partners for that opportunity will automatically have the `IsPrimary` value set to 0 (`false`).

This mapping allows the API to manage the objects and their relationship efficiently.

Creating an Account-Account Partner Relationship

When you create a partner relationship between two accounts (when you create a Partner object and specify the `AccountFromId`), the API automatically creates two AccountPartner objects, one for the forward relationship and one for the reverse. For example, if you create a Partner object with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`, the API automatically creates two AccountPartner objects:

- The forward relationship AccountPartner with "Acme, Inc." as the `AccountFromId` and "Acme Consulting" as the `AccountToId`.
- The reverse relationship AccountPartner with "Acme Consulting" as the `AccountFromId` and "Acme, Inc." as the `AccountToId`.
- The value of the `Role` field in the reverse relationship AccountPartner is set to the PartnerRole object `ReverseRole` value associated with the value of the `Role` field in the forward relationship AccountPartner.

This mapping allows the API to manage the objects and their relationship efficiently.

SEE ALSO:

AccountPartner

OpportunityPartner

UserRole

PartnerRole

PartnerFundAllocation

Represents allocated funds from a partner marketing budget for channel partners. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Amount`	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Total amount of the allocation.
`BudgetId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner marketing budget.
`ChannelPartnerId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the allocation.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the allocation.
Title	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The title of the allocation.

Field Name	Details
`TotalApprovedFcs`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
`TotalApprovedFrs`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund requests.
`TotalReimbursedFcs`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.

PartnerFundAllocationFeed

Represents a single feed item on a partner fund allocation feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>`

Field Name	Details
	• <i> • <u> • <s> • • • • <img> The <img> tag is accessible only via the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img> Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are: • NetworkId—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope.

Field Name	Details
	• Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund allocation.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field Name	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object.

Field Name	Details
	• `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

PartnerFundAllocationHistory

Represents the history of changes to the values in the fields of a partner fund allocation object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.
PartnerFundAllocationId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund allocation.

PartnerFundAllocationOwnerSharingRule

Represents a rule for sharing a partner fund allocation object with users other than the owner. This object is available in API version 41.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to records. Values are: • `Read Only` • `Read/Write`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the source group. Records that are owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that you are granting access to.

SEE ALSO:
PartnerFundAllocation
PartnerFundAllocationShare
Metadata API Developer Guide: SharingRules

PartnerFundAllocationShare

Represents a sharing entry on a partner fund allocation record. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the partner fund allocation record with them. • `Owner`—The user is the owner of the partner fund allocation record or is in a role above the partner fund allocation record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the partner fund allocation.

PartnerFundClaim

Represents a claim of funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

Supported Calls

`create()` `delete()` `describeLayout()` `describeSObjects()` `getDeleted()` `getUpdated()` `query()` `retrieve()` `search()` `update()`, `upsert()`

Fields

Field Name	Details
AllocationId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the partner fund allocation.
Amount	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Amount of the claim.
BudgetId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the partner marketing budget.
ChannelPartnerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the fund claim.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the fund claim.
RequestId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the partner fund request.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable Restricted picklist, Sort, Update **Description** Status of the fund claim. Values are: • Draft • Approved • Rejected • Paid
Title	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** Title of the fund claim.

PartnerFundClaimFeed

Represents a single feed item on a partner fund claim feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.

Field Name	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are: • `NetworkId`—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`. • Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund claim.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher.

Field Name	Details
	• `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

PartnerFundClaimHistory

Represents the history of changes to the values in the fields of a partner fund claim object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description New value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.
`PartnerFundClaimId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund claim.

PartnerFundClaimOwnerSharingRule

Represents a rule for sharing a partner fund claim object with users other than the owner. This object is available in API version 41.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to records. Values are: • `Read Only` • `Read/Write`

Field Name	Details
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the source group. Records that are owned by users in the source group trigger the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description ID of the user or group that you are granting access to.

SEE ALSO:

PartnerFundClaim

PartnerFundClaimShare

Metadata API Developer Guide: SharingRules

PartnerFundClaimShare

Represents a sharing entry on a partner fund claim record. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include:

Field Name	Details
	• `Manual`—The user or group has access because a user with All access manually shared the partner fund claim record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the partner fund claim record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the partner fund claim record.

PartnerFundRequest

Represents a request for funds from the partner marketing budget by a channel partner. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()` `describeLayout()` `describeSObjects()` `getDeleted()` `getUpdated()` `query()` `retrieve()` `search()` `update()`, `upsert()`

Fields

Field Name	Details
`Activity`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Activity that is covered by the funds, for example, a trade show or seminar.
`AllocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the partner fund allocation.

Field Name	Details
Amount	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Approved amount of request.
BudgetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the partner marketing budget.
CampaignId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the related campaign, if there is one.
ChannelPartnerId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the channel partner.
Description	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the fund request.
DesiredOutcome	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Desired outcome if requested funds are used.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the fund request.
RequestedAmount	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of the fund request.
Status	**Type** picklist **Properties** Create, Filter, Nillable, Group, Restricted picklist, Sort, Update **Description** Status of the fund request. Values are: • Draft • Approved • Rejected

Field Name	Details
`Title`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the fund request.
`TotalApprovedFcs`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
`TotalReimbursedFcs`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.

PartnerFundRequestFeed

Represents a single feed item on a partner fund request feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>`

Field Name	Details
	• `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are: • NetworkId—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope.

Field Name	Details
	• Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund request.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field Name	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object.

Field Name	Details
	• `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. **Note:** If you set `type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

PartnerFundRequestHistory

Represents the history of changes to the values in the fields of a partner fund request object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.
`PartnerFundRequestId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner fund request.

PartnerFundRequestOwnerSharingRule

Represents a rule for sharing a partner fund request object with users other than the owner. This object is available in API version 41.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to records. Values are: • `Read Only` • `Read/Write`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the source group. Records that are owned by users in the source group trigger the rule to give access.

Field Name	Details
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that you are granting access to.

SEE ALSO:

- PartnerFundRequest
- PartnerFundRequestShare
- *Metadata API Developer Guide*: SharingRules

PartnerFundRequestShare

Represents a sharing entry on a partner fund request record. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
`ParentId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the partner fund request record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the partner fund request record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the partner fund request record.

PartnerMarketingBudget

Represents a budget that provides funds to channel partners for selling and marketing products and services. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Amount`	**Type** currency

Field Name	Details
	Properties Create, Filter, Sort, Update **Description** Total amount of the budget.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the budget.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Date when the budget is no longer available.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the budget.

Field Name	Details
StartDate	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** Date when the budget becomes available.
Title	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Title of the budget.
TotalAllocatedAmount	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total funds allocated to channel partners or as a fund pool.
TotalApprovedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund claims.
TotalApprovedFrs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of approved fund requests.
TotalReimbursedFcs	**Type** currency **Properties** Filter, Nillable, Sort **Description** Total amount of reimbursed fund claims.

Field Name	Details
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of budget. Values are: • `Co-Operated Budget`—Funds accrue based on a percentage of partner sales. The funds are available based on previous activity. • `Marketing Funds`—Funds are issued to partners in advance of sales. The funds are awarded based on predicted or expected behavior.

PartnerMarketingBudgetFeed

Represents a single feed item on a partner marketing budget feed. This object is available in API version 41.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.

Field Name	Details
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. Values are: • `NetworkId`—The ID of the community in which the feed item is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`. • Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the partner marketing budget.

Field Name	Details
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a RypplePost. This field is typically null for all posts except ContentPost and RypplePost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Values are: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval. • BasicTemplateFeedItem—Not used. • CanvasPost—a post made by a canvas app posted on a feed. • CollaborationGroupCreated—generated when a user creates a public group. • CollaborationGroupUnarchived—Not used.

Field Name	Details
	• `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field Name	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. Values are: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

PartnerMarketingBudgetHistory

Represents the history of changes to the values in the fields of a partner marketing budget object. Access is read-only. This object is available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the field that was changed.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** New value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Old value of the field that was changed.
`PartnerMarketingBudgetId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of partner marketing budget.

PartnerMarketingBudgetOwnerSharingRule

Represents a rule for sharing a partner marketing budget object with users other than the owner. This object is available in API version 41.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Determines the level of access users have to records. Values are:

Field Name	Details
	• `Read Only` • `Read/Write`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the source group. Records that are owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the UI. Maximum length is 80 characters.

Field Name	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that you are granting access to.

SEE ALSO:

PartnerMarketingBudget

PartnerMarketingBudgetShare

Metadata API Developer Guide: SharingRules

PartnerMarketingBudgetShare

Represents a sharing entry on a partner marketing budget record. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The level of access allowed, for example, read or write.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
RowCause	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that the sharing entry exists. Values may include: • `Manual`—The user or group has access because a user with All access manually shared the partner marketing budget record with them. • `Owner`—The user is the owner of the channel program record or is in a role above the partner marketing budget record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the partner marketing budget record.

PartnerNetworkConnection

Represents a Salesforce to Salesforce connection between Salesforce organizations.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Account associated with this connection.
`ConnectionName`	**Type** string **Properties** Filter, idLookup, Sort

Field	Details
	Description A descriptive name for the connection. Limit: 295 characters.
`ConnectionStatus`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the Salesforce to Salesforce connection. The picklist includes the following values: • `Sent` • `Received` • `Pending` • `Accepted` • `Rejected` • `Inactive` • `Disconnecting` • `ConnectionSuspended` • `SubscribeInProgress` • `UsersInitialSync` • `BulkSyncMetadata`
`ConnectionType`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of Salesforce to Salesforce connection. The picklist includes the following values: • `Standard` • `Replication` This field is available in API version 30.0 and later.
`ContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Contact associated with this connection.

Field	Details
IsSyncAuditFields	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether audit fields are synced between the primary and secondary organization in a replication connection. This field is available in API version 32.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
IsSyncMetadata	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether supported types of metadata are synced from the primary to the secondary organization in a replication connection. This field is available in API version 33.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
IsSyncUsers	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether users with standard Salesforce user licenses are synced between the primary and secondary organization in a replication connection. This field is available in API version 35.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
PrimaryContactId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the User associated with this connection.
ReplicationRole	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description The role of this Salesforce organization in the replication connection. The picklist includes the following values: • `Primary` • `Secondary` This field is available in API version 30.0 and later, and is only accessible in Salesforce organizations where Organization Sync is enabled.
`ResponseDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the connection was accepted or rejected.

Usage

Represents Salesforce to Salesforce standard and replication connections. This object is referenced by all objects that have been shared with other organizations, enabling you to determine which connections shared a record with you. If the organization does not have Salesforce to Salesforce enabled, the PartnerNetworkConnection object is not available, and you can't access it via the API.

SEE ALSO:

PartnerNetworkRecordConnection

PartnerNetworkRecordConnection

Represents a record shared between Salesforce organizations using Salesforce to Salesforce.

Supported Calls

`create()`, `query()`

Fields

Field	Details
`ConnectionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description Required. ID of the connection a record is shared with.
EndDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date that sharing of the record was stopped.
LocalRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the shared record.
ParentRecordId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the parent record of the shared record.
PartnerRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the shared record in the connection's organization.
RelatedRecords	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** A comma-separated list of API names for child records to be shared with a parent record.
SendClosedTasks	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Filter, Group, Sort **Description** Forwards closed tasks related to the shared record.
`SendEmails`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Sends an email notifying the connection's representative that you have forwarded the record to them. Only new recipients of a record will receive a notification email.
`SendOpenTasks`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Forwards open tasks related to the shared record.
`StartDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Date that the shared record was accepted.
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the shared record. One of the following values: • `Active (received)` • `Active (sent)` • `Connected` • `Inactive` • `Inactive (converted)` • `Inactive (deleted)` • `Pending (sent)`

Usage

When you create a PartnerNetworkRecordConnection, you forward a record to a connection.

Note: Attempting to forward a record from an object to which the connection is not subscribed results in an `Invalid Partner Network Status` error.

When you delete a PartnerNetworkRecordConnection, you stop sharing a record with a connection.

- To share a record, use the following fields: `LocalRecordID` and `ConnectionId`
- To share a child of a parent record, use the following fields: `LocalRecordID`, `ConnectionId`, and `ParentRecordID`
- To share a child of a parent record and its child records, use the following fields: `LocalRecordID`, `ConnectionId`, `ParentRecordID`, and `RelatedRecords`

If the organization does not have Salesforce to Salesforce enabled, the PartnerNetworkRecordConnection object is not available, and you can't access it using the API.

Sample Code—Apex

The following example shows how to forward a record.

```
List<PartnerNetworkConnection)> connMap = new List<PartnerNetworkConnection>(
    [select Id, ConnectionStatus, ConnectionName from PartnerNetworkConnection
        where ConnectionStatus = 'Accepted']
);
for(PartnerNetworkConnection network : connMap) {
     PartnerNetworkRecordConnection newrecord = new PartnerNetworkRecordConnection();

    newrecord.ConnectionId = network.Id;
    newrecord.LocalRecordId = accountId;
    newrecord.RelatedRecords = 'Contact,Opportunity,Orders__c';
    newrecord.SendClosedTasks = true;
    newrecord.SendOpenTasks = true;
    newrecord.SendEmails = true;

    insert newrecord;
}
```

The following example shows how to stop sharing a record.

```
List<PartnerNetworkRecordConnection> recordConns = new List<PartnerNetworkRecordConnection>(

    [select Id, Status, ConnectionId, LocalRecordId from PartnerNetworkRecordConnection
        where LocalRecordId in :accounts]
);

   for(PartnerNetworkRecordConnection recordConn : recordConns) {
        if(recordConn.Status.equalsignorecase('Sent')){ //account is connected - outbound

            delete recordConn;
```

```
        }
    }
```

SEE ALSO:

PartnerNetworkConnection

PartnerNetworkSyncLog

Represents the Org Sync Log tab in Salesforce, where Salesforce administrators can track the replication of record inserts and updates being performed in Organization Sync. The Connection Detail page for the replication connection also displays the Org Sync Log's twenty most recent entries, and provides a link to the log.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Special Access Rules

The Org Sync Log tab can only be added in organizations where Organization Sync has been enabled. To add the tab to the Salesforce user interface, users must also have the "Manage Connections" user permission.

Fields

Field Name	Details
ConnectionEvent	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The action being replicated to the partner organization, such as a record insertion.
ConnectionId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Salesforce to Salesforce replication connection in which the replication event succeeded or failed.
Description	**Type** textarea

Field Name	Details
	Properties Nillable **Description** A description of the replication event.
`EntityType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of record being inserted or updated.
`Error`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The code used to describe the replication failure or success.
`LocalRecord`	**Type** string **Properties** Filter, Group, Sort **Description** The record being inserted or updated.
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** An item is added to the Organization Sync Log if it failed to be replicated to the linked organization. This picklist includes the following values: • `Failed`: The replication continued to fail after multiple retries, and won't be retried further. • `Resolved`: The replication succeeded after retrying. • `Retrying`: Salesforce is retrying the replication. This field is available in API version 35.0 and later.

PartnerRole

Represents a role for an account Partner, such as consultant, supplier, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, NillableSort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this partner role value. This display value is the internal label that does not get translated. Limit: 255 characters.
`ReverseRole`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Name of the reverse role that corresponds to this partner role. For example, if the role is “subcontractor,” then the reverse role might be “general contractor.” In the user interface, assigning a partner role to an account creates a reverse partner relationship so that both accounts list the other as a partner.
`SortOrder`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** Number used to sort this value in the partner role picklist. These numbers are not guaranteed to be sequential, as some previous partner role values might have been deleted.

Usage

This object represents a value in the partner role picklist. In the user interface, the partner role picklist provides additional information about the role of a Partner, such as their corresponding reverse role. Query this object to retrieve the set of values in the partner role picklist, and then use that information while processing PartnerRole records to determine more information about a given partner role. For example, the application could determine the reverse role of a given Partner `Role` value and the value of the `ReverseRole` property in the associated PartnerRole object.

SEE ALSO:

Object Basics

Period

Represents a fiscal period defined in FiscalYearSettings.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`EndDate`	**Type** date **Properties** Filter, Group, Sort **Description** The last date of the fiscal period.

Field	Details
FiscalYearSettingsId	**Type** reference **Properties** Filter, Nillable, Group, Sort **Description** The parent record for this period.
FullyQualifiedLabel	**Type** string **Properties** Group, Nillable **Description** Represents the period's complete name in the UI. For example, "September FY 2016".
IsForecastPeriod	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the period is associated with customizable forecasts (`true`) or not (`false`).
Number	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** If the labeling scheme of your fiscal year's quarters or months is numbered, this field indicates the relative number of the row.
PeriodLabel	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** If the months in your fiscal year use custom names, then this field contains the appropriate name for rows of type Month.
QuarterLabel	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort

Field	Details
	Description If the quarters in your fiscal year use custom names, then this field contains the appropriate name for rows of type Quarter.
`StartDate`	**Type** date **Properties** Filter, Group, Sort **Description** The first date of the fiscal period.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates whether the period is of type Month, Quarter, Week, or Year. Label is the field value.

Usage

In API version 36.0 and earlier, querying the Period object yields no results. In API version 37.0 and later, a query returns period records.

SEE ALSO:

FiscalYearSettings

PermissionSet

Represents a set of permissions that's used to grant additional access to one or more users without changing their profile or reassigning profiles. This object is available in API version 22.0 and later.

You can use permission sets to grant access, but not to deny access.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** string

Field Name	Details
	Properties Create, Filter, Nillable, Group, Sort, Update **Description** A description of the permission set. Limit: 255 characters.
`HasActivationRequired`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the permission set requires an associated active session (`true`) or not (`false`).
`IsCustom`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the permission set is custom (created by an admin); if `false`, the permission set is standard and related to a specific permsision set license.
`IsOwnedByProfile`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the permission set is owned by a profile. Available in API version 25.0 and later.
`Label`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The permission set label, which corresponds to **Label** in the user interface. Limit: 80 characters.
`LicenseId`	**Type** ID **Properties** Create, Filter, Group, Nillable, Sort

Field Name	Details
	Description The ID of either the related PermissionSetLicense or UserLicense associated with this permission set. Available in API version 38.0 and later. Use this field instead of `UserLicenseId`, which is deprecated and only available up to API Version 37.0.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Corresponds to **API Name** in the user interface. Limit: 80 characters.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix for a permission set that's been installed as part of a managed package. If the permission set isn't packaged or is part of an unmanaged package, this value is empty. Available in API version 23.0 and later.
`Permissions`*`PermissionName`*	**Type** boolean **Properties** Create, Filter, Update **Description** One field for each permission. If `true`, users assigned to this permission set have the named permission. The number of fields varies depending on the permissions for the organization and license type. Tip: To get a list of available permissions in the SOAP API, use `describeSObjects()`.
`ProfileId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description If the permission set is owned by a profile, this field returns the ID of the Profile. If the permission set isn't owned by a profile, this field returns a null value. Available in API version 25.0 and later.
`UserLicenseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the UserLicense associated with this permission set. This field is nillable in API version 26.0 and later and available up to API version 37.0 In API version 38.0 and later, use `LicenseId`.

Usage

Use the PermissionSet object to query existing permission sets.

For example, to search for all permission sets that contain the "Modify All Data" permission:

```
SELECT Name, PermissionsModifyAllData
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

When combined with the PermissionSetAssignment object, you can create a nested query that returns all users assigned to a particular permission like "Modify All Data":

```
SELECT Name, (SELECT AssigneeId FROM Assignments)
FROM PermissionSet
WHERE PermissionsModifyAllData=true
```

You can also create a permission set, or delete a permission set if it isn't assigned to a user.

User Licenses

The user license controls the permissions that are available in a permission set.

Every permission set can be associated with a user license or permission set license. If you plan to assign a permission set to multiple users with different user and permission set licenses, leave `LicenseId` empty. If only users with one type of license will use this permission set, set the `LicenseId` to that single user or permission set license. If you want a permission set associated with a permission set license, then set `LicenseId` to the permission set license. To get the `LicenseId`, run this query:

```
SELECT Id, Name
FROM UserLicense
```

Alternatively, to query a user or profile for the `LicenseId`.

```
SELECT Id, Profile.UserLicenseId
FROM User
```

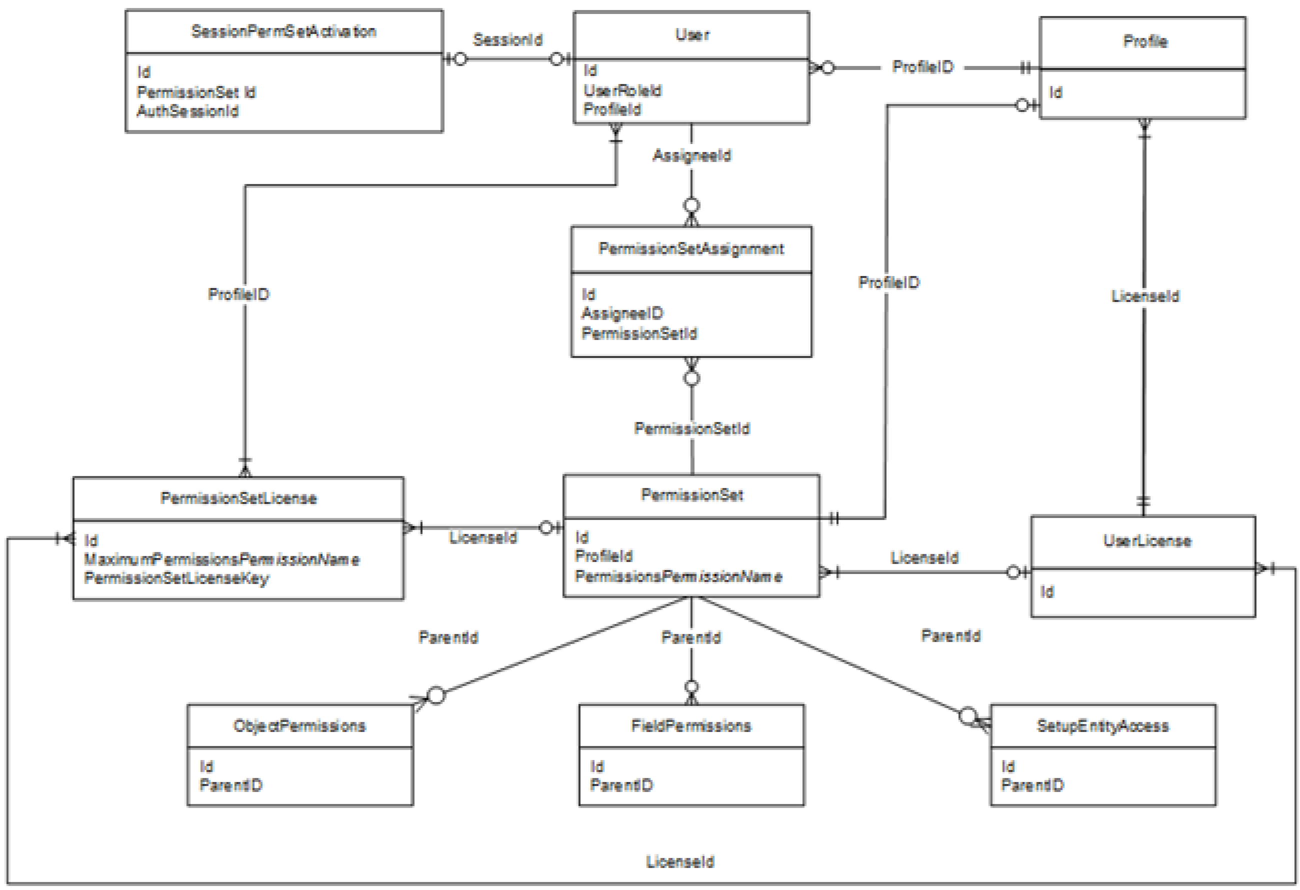
Child Objects

When using the API, think of each permission set or related set of access controls as an empty container that you fill with permission records.

In the API, a permission set can contain user, object, and field permissions, as well as setup entity access settings for other settings, such as Apex classes.

- ObjectPermissions and FieldPermissions objects are available in API version 24.0 and later.
- The SetupEntityAccess object is available in API version 25.0 and later.

Only user permissions are managed in the PermissionSet API object; all other permission types are managed in child API objects.



In these child objects, access is stored in a record, while the absence of a record indicates no access. To return a record in a SOQL query, a minimum permission or setting is required for each child object.

Because permissions are stored in related objects, it's important to understand what questions to ask when using SOQL. For example, you might want to know which permission sets have "Delete" on an object or have the right to approve a return merchandise authorization (where the approval checkbox is controlled with field permissions). Asking the right questions when using SOQL with permission sets ensures that you get the information you need to make an informed decision, such as whether to migrate permissions or assign a permission set to a user.

For example, the following returns all permission sets where the “Read” permission is enabled for the Merchandise__c object.

```
SELECT SobjectType, ParentId, PermissionsRead
FROM ObjectPermissions
WHERE PermissionsRead = True AND SobjectType = 'Merchandise__c'
```

You can query for all permission sets that have “Read” on an object. However, you can’t query for permission sets that have no access on an object, because no records exist for that object. For example, the following returns no records because the object must have at least “Read” to return any records.

```
SELECT SobjectType, ParentId, PermissionsRead
FROM ObjectPermissions
WHERE PermissionsRead = False AND SobjectType = 'Merchandise__c'
```

If you have at least the “Read” permission on an object, you can create a conditional query on other permissions in the same object. For example, the following returns any records where the object has at least the “Read” permission but not the “Edit” permission.

```
SELECT ParentId, PermissionsRead, PermissionsEdit
FROM ObjectPermissions
WHERE PermissionsEdit = False AND SobjectType = 'Merchandise__c'
```

To set an object or field permission to no access, delete the record that contains the permission. For example, to disable all object permissions in the Merchandise__c object for a particular permission set, first query to retrieve the ID of the object permission record.

```
SELECT Id
FROM ObjectPermissions
WHERE SobjectType = 'Merchandise__c'
```

Then delete the IDs returned from the query.

Note: If you try to update the object or field permissions by setting all permissions to false, the permission record is automatically deleted; any subsequent queries for the record ID won’t return results and you must add a new permission record to grant access.

View a Permission Set with Nested Queries

You can build on the PermissionSet object using child relationships that show all of the permissions in a single permission set. For example, the following returns all permission sets and displays the “Transfer Leads” permission, as well as any “Read” permissions on any objects and fields.

```
SELECT Label, PermissionsTransferAnyLead,
(SELECT SobjectType, PermissionsRead FROM ObjectPerms),
(SELECT SobjectType, Field, PermissionsRead FROM FieldPerms)
FROM PermissionSet
```

Associated Profiles

In API version 25.0 and later, every profile is associated with a permission set that stores the profile’s user, object, and field permissions, as well as setup entity access settings. You can query permission sets that are owned by profiles but not modify them.

The following example returns all permission sets, including those owned by a profile.

```
SELECT Id, Label, ProfileId, Profile.Name
FROM PermissionSet
```

The following returns all permission sets except those owned by profiles.

```
SELECT Id, Label, ProfileId, Profile.Name, IsOwnedByProfile
FROM PermissionSet
WHERE IsOwnedByProfile = FALSE
```

Because permission sets have child objects in the API, you can query their values on permission sets owned by a profile. For example, the following returns all enabled object permission records for profiles only.

```
SELECT Id,ParentId, PermissionsRead, SobjectType, Parent.ProfileId
FROM ObjectPermissions
WHERE Parent.IsOwnedByProfile = TRUE
```

Once you have the IDs for permission sets that are owned by profiles as well as those not owned by profiles, you can use the PermissionSetAssignment object to determine whether users can access an object or field via a permission in their profile or any of their permission sets. For example, the following SOQL query returns all users who have the "Read" permission on the Merchandise__c object and specifies whether the permission is granted through a profile or permission set.

```
SELECT Assignee.Name, PermissionSet.Id, PermissionSet.isOwnedByProfile
FROM PermissionSetAssignment
WHERE PermissionSetId
IN (SELECT ParentId
FROM ObjectPermissions
WHERE SObjectType = 'Merchandise__c' AND PermissionsRead = true)
```

Note: For permission sets that are owned by profiles, don't use any Name and Label values that are returned in a query, as they can change at any time.

SEE ALSO:

- ObjectPermissions
- FieldPermissions
- SetupEntityAccess
- PermissionSetAssignment
- Profile

PermissionSetAssignment

Represents the association between a User and a PermissionSet. This object is available in API version 22.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AssigneeId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the User to assign the permission set specified in `PermissionSetId`.
`PermissionSetId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the PermissionSet to assign to the user specified in `AssigneeId`.

Usage

Finding Permission Set Assignments

Use the PermissionSetAssignment object to query permission set assignments to find out which permission sets are assigned to which users. Because each user may be assigned to many permission sets and each permission set may be assigned to many users, each PermissionSetAssignment ID represents the association of a single user and single permission set.

For example, to search for all of the permission sets assigned to a particular user:

```
SELECT Id, PermissionSetId
FROM PermissionSetAssignment
WHERE AssigneeId = '005600000017cKt'
```

To search for all users assigned to a particular permission set:

```
SELECT Id, AssigneeId
FROM PermissionSetAssignment
WHERE PermissionSetId = '0PS30000000000e'
```

You can also create a new permission set assignment, or use delete to remove a permission set that's assigned to a user. To update an assignment, delete an existing assignment and insert a new one.

User Licenses

When assigning a permission set, if the PermissionSet has a `UserLicenseId`, its `UserLicenseId` and the Profile `UserLicenseId` must match. To determine a user's license assignment, query the user's profile and then query the profile's license.

For example, to find a user's profile ID:

```
SELECT Id, ProfileId
FROM User
WHERE Id = '005D0000001GMAT'
```

To find a permission set's `UserLicenseId`:

```
SELECT Id, LicenseId
FROM PermissionSet
WHERE Id = '0PS30000000000e'
```

If the IDs match, the assignment succeeds.

To find all the permission sets with no license that are assigned to any user:

```
SELECT Id, Assignee.Name, PermissionSet.Name
FROM PermissionSetAssignment
WHERE PermissionSet.LicenseId = null
```

SEE ALSO:

PermissionSet

PermissionSetLicense

Represents a license that's used to enable one or more users to receive a specified permission without changing their profile or reassigning profiles. You can use permission set licenses to grant access, but not to deny access. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ExpirationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date at which the permission set license expires.

Field Name	Details
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the permission set license.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The label of the permission set license. Label is **Permission Set License Label**.
MaximumPermissions*PermissionName*	**Type** boolean **Properties** Filter, **Description** One field for each permission. For example, `MaximumPermissionsIdentityConnect` corresponds to the "Use Identity Connect" permission. If *true*, this PermissionSetLicense grants the specified permission. The number of fields varies depending on the permissions available for the organization.
MaximumPermissionsShowCompanyNameAsUserBadge	**Type** boolean **Properties** Filter **Description** When on, a user's company name, if available, will be displayed in place of the community role.
PermissionSetLicenseKey	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A string that uniquely identifies a particular permission set license.

Field Name	Details
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of a permission set license. If `Active`, the permission set license is available. If `Disabled`, the permission set license has expired.
`TotalLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The total number of this permission set license that are available to your organization.
`UsedLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The number of this permission set license that are currently assigned to users.

Usage

Users with the “View Setup and Configuration” permission can use the PermissionSetLicense object to view the set of currently defined permission set licenses in your organization.

Use the PermissionSetLicense object to query existing permission licenses.

For example, to return a list of all active permission set licenses:

```
SELECT MasterLabel
FROM PermissionSetLicense
WHERE Status = 'Active'
```

When combined with the PermissionSetLicenseAssign object, you can create a nested query that returns all users assigned to a particular permission set license like “Identity Connect”:

```
SELECT MasterLabel, (SELECT AssigneeId FROM PermissionSetLicenseAssignments)
FROM PermissionSetLicense
WHERE MaximumPermissionsIdentityConnect=true
```

SEE ALSO:

PermissionSetLicenseAssign

PermissionSetLicenseAssign

Represents the association between a User and a PermissionSetLicense. This object is available in API version 29.0 and later.

Note: The relationship name for PermissionSetLicenseAssign is *`PermissionSetLicenseAssignments`*.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AssigneeId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User to assign the permission set license specified in `PermissionSetLicenseId`.
`PermissionSetLicenseId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the permission set license the user is assigned to.

Usage

Use the PermissionSetLicenseAssign object for querying permission set license assignments to find out which permission set licenses are assigned to which users. Because each user can be assigned to many permission set licenses, each PermissionSetLicenseAssign ID represents the association of a single user and single permission set license.

For example, to search for all of the permission sets assigned to a particular user:

```
SELECT Id, PermissionSetLicenseId
FROM PermissionSetLicenseAssign
WHERE AssigneeId = '005D0000001RFek'
```

To search for all users assigned to a particular permission set license:

```
SELECT AssigneeId
FROM PermissionSetLicenseAssign
WHERE PermissionSetLicenseId = '0PLD000000003mwOAA'
```

You can also create a new permission set license assignment, or use delete to remove a permission set license that's been assigned to a user. To update an assignment, delete an existing assignment and insert a new one.

SEE ALSO:

PermissionSetLicense

PlatformAction

PlatformAction is a virtual read-only object. It enables you to query for actions displayed in the UI, given a user, a context, device format, and a record ID. Examples include standard and custom buttons, quick actions, and productivity actions.

Supported Calls

`query()`

Fields

Field	Details
`ActionListContext`	**Type** string **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Required. The list context this action applies to. Valid values are: • `Assistant` • `BannerPhoto` • `Chatter` • `Dockable` • `FeedElement` • `FlexiPage` • `Global` • `ListView` • `ListViewDefinition` • `ListViewRecord` • `Lookup` • `MruList` • `MruRow` • `ObjectHomeChart` • `Photo` • `Record`

Field	Details
	• `RecordEdit` • `RelatedList` • `RelatedListRecord`
`ActionTarget`	**Type** string **Properties** Nillable **Description** The URL to invoke or describe the action when the action is invoked. If the action is a standard button overridden by a Visualforce page, the ActionTarget returns the URL of the Visualforce page, such as `/apex/`*`pagename`*. This field is available in API version 35.0 and later.
`ActionTargetType`	**Type** string **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the target when this action is triggered. Valid values are: • `Describe`—applies to actions with a user interface, such as quick actions • `Invoke`—applies to actions with no user interface, such as action links or invocable actions • `Visualforce`—applies to standard buttons overridden by a Visualforce page
`ActionTargetUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL to invoke or describe the action when the action is invoked. This field is deprecated in API version 35.0 and later. Use `ActionTarget` instead.
`Category`	**Type** string **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Applies only to action links. Denotes whether the action link shows up in the feed item list of actions or the overflow list of actions. Valid values are: • `Primary`

Field	Details
	• `Overflow`
`ConfirmationMessage`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Applies only to action links. The message to display before the action is invoked. Field is null if no confirmation is required before invoking the action.
`DeviceFormat`	**Type** string **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies which action icon the PlatformAction query returns. If this field isn't specified, it defaults to Phone. Valid values are: • `Aloha` • `Desktop` • `Phone` • `Tablet`
`ExternalId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the PlatformAction. If the action doesn't have an ID, its API name is used.
`GroupId`	**Type** ID **Properties** Filter, Group, Nillable, Sort **Description** The unique ID of a group of action links.
`IconContentType`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The content type—such as .jpg, .gif, or .png—of the icon for this action. Applies to both custom and standard icons assigned to actions.
`IconHeight`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The height of the icon for this action. Applies only to standard icons.
`IconUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL of the icon for this action.
`IconWidth`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The width of the icon for this action. Applies only to standard icons.
`InvocationStatus`	**Type** string **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the action within the feed item. Applies to action links only. Valid values are: • `Failed` • `New` • `Pending` • `Successful`
`InvokedByUserId`	**Type** ID **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of the user who most recently invoked this action within the current feed item. Applies to action links only.
IsGroupDefault	**Type** boolean **Properties** Filter, Group, Sort **Description** Denotes whether this action is the default in an action link group. False for other action types. Applies to action links only.
IsMassAction	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the action can be performed on multiple records. This field is available in API version 38.0 and later.
Label	**Type** string **Properties** Filter, Group, Sort **Description** The label to display for this action.
PrimaryColor	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The primary color of the icon for this action.
RelatedListRecordId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Represents the ID of a record in an object's related list. This field is available in API version 38.0 and later.

Field	Details
`RelatedSourceEntity`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** When the `ActionListContext` is RelatedList or RelatedListRecord, this field represents the API name of the related list to which the action belongs.
`Section`	**Type** string **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The section of the user interface the action resides in. Applicable only to Lightning Experience. Valid values are: • ActivityComposer • CollaborateComposer • NotesComposer • Page • SingleActionLinks This field is available in API version 35.0 and later.
`SourceEntity`	**Type** string **Properties** Filter, Group, Sort **Description** Required. The object or record with which this action is associated.
`Subtype`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The subtype of the action. For quick actions, the subtype is `QuickActionType`. For custom buttons, the subtype is `WebLinkTypeEnum`. For action links, subtypes are `Api`, `ApiAsync`, `Download`, and `Ui`. Standard buttons and productivity actions have no subtype.
`TargetObject`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The type of object record the action creates, such as a contact or opportunity. This field is available in API version 41.0 and later.
`TargetUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The URL that a custom button or link points to. This field is available in API version 41.0 and later.
`Type`	**Type** string **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of the action. Valid values are: • `ActionLink`—An indicator on a feed element that targets an API, a web page, or a file, represented by a button in the Salesforce Chatter feed UI. • `CustomButton`—When clicked, opens a URL or a Visualforce page in a window or executes JavaScript. • `InvocableAction` • `ProductivityAction`—Productivity actions are predefined and attached to a limited set of objects. Productivity actions include Send Email, Call, Map, View Website, and Read News. Except for the Call action, you can't edit or delete productivity actions. • `QuickAction`—A global or object-specific action. • `StandardButton`—A predefined Salesforce button such as New, Edit, and Delete.

Usage

PlatformAction can be described using describeSObject().

You can directly query for PlatformAction. For example, this query returns all fields for actions associated with each of the records of the listed objects:

```
SELECT ExternalId, ActionTargetType, ActionTargetUrl, ApiName, Category,
      ConfirmationMessage, ExternalId, GroupId, UiTheme, IconUrl, IconContentType,
      IconHeight, IconWidth, PrimaryColor, InvocationStatus, InvokedByUserId,
      IsGroupDefault, Label, LastModifiedDate, Subtype, SourceEntity, Type
FROM PlatformAction
```

```
WHERE SourceEntity IN ('001xx000003DGsH', '001xx000003DHBq', 'Task', 'Global') AND
      ActionListContext = 'Record';
```

> **Note:** To query PlatformAction, provide the `ActionListContext` and `SourceEntity`. If you query for `ActionListContext` with a value of `RelatedList`, and don't specify a `RelatedSourceEntity`, the query returns the API name of the related list.

This query uses multiple `ActionListContext` values in its `WHERE` clause to return all actions in the Lightning Experience user interface (`DeviceFormat = 'Desktop'`) for the specified object:

```
SELECT ActionListContext, Label, Type, Subtype, Section, SourceEntity,
     RelatedSourceEntity, ActionTarget, ActionTargetType, ApiName, Category,
     ConfirmationMessage, DeviceFormat, ExternalId, GroupId, IconContentType,
     IconHeight, IconUrl, IconWidth, Id, InvocationStatus, InvokedByUserId,
     IsGroupDefault, LastModifiedDate, PrimaryColor
FROM PlatformAction
WHERE ActionListContext IN ('Record','Chatter','RelatedList') AND
      SourceEntity = '001xx000003DlvX' AND
      DeviceFormat = 'Desktop'
```

PresenceUserConfig

Represents a configuration that determines a presence user's settings. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Capacity`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The maximum number of work assignments that can be pushed to an agent at a time.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.

Field	Details
	In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence configuration.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the presence configuration.
`OptionsIsAutoAcceptEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether work items that are routed to agents are automatically accepted (`true`) or not (`false`). Available only if `OptionsIsDeclineEnabled` is set to `false`.
`OptionsIsDeclineEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether agents can decline work items that are routed to them (`true`) or not (`false`). Available only if `OptionsIsAutoAcceptEnabled` is set to `false`.
`OptionsIsDeclineReasonEnabled`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates whether agents can select a reason for declining work requests (`true`) or not (`false`). This can be selected only if decline reasons are enabled.
`OptionsIsDisconnectSoundEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether a sound is played when agents are disconnected from Omni-Channel (`true`) or not (`false`).
`OptionsIsRequestSoundEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether a sound plays with incoming work requests (`true`) or not (`false`). Set to `true` by default.
`PresenceStatusOnDeclineId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the presence status that's automatically assigned to the agent when the agent declines a work item. Available only if `OptionsIsDeclineEnabled` is set to `true`.
`PresenceStatusOnPushTimeoutId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the presence status that's automatically assigned to the agent when the agent doesn't respond to a work item before push timeout occurs. Available in API version 36.0 and later.

PresenceUserConfigProfile

Represents a configuration that determines the settings that are assigned to presence users who are assigned to a specific profile. User-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`PresenceUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** If an individual user is also assigned a presence configuration through the PresenceUserConfigProfile, this configuration will override that.
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the profile that's associated with this presence configuration. A profile can be associated with only one presence configuration.

PresenceUserConfigUser

Represents a configuration that determines the settings that are assigned to a presence user. These user-level configurations override profile-level configurations. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`PresenceUserConfigId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the presence configuration.

Field	Details
UserId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user who's associated with this presence configuration. A user can be associated with only one presence configuration.

Pricebook2

Represents a price book that contains the list of products that your org sells.

Note: Price books are represented by Pricebook2 objects. As of API version 8.0, the Pricebook object is no longer available. Requests containing Pricebook are refused, and responses do not contain the Pricebook object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
Description	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the price book.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the price book is active (`true`) or not (`false`). Inactive price books are hidden in many areas in the user interface. You can change this field's value as often as necessary. Label is **Active**.

Field	Details
`IsArchived`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the price book has been archived (true) or not (false). This field is read only.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the price book has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsStandard`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the price book is the standard price book for the org (`true`) or not (`false`). Every org has one standard price book—all other price books are custom price books.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of this object. This field is read-only for the standard price book. Label is **Price Book Name**.

Usage

A price book is a list of products that your org sells.

- Each org has one standard price book that defines the standard or generic list price for each product or service that it sells.
- An org can have multiple custom price books to use for specialized purposes, such as for discounts, different channels or markets, or select accounts or opportunities. While your client application can create, delete, and update custom price books, your client application can update only the standard price book.

- For some orgs, the standard price book is the only price needed. If you need to set up other price books, you can reference the standard price book when setting up list prices in custom price books.

Use this object to query standard and custom price books that have been configured for your org. A common use of this object is to allow your client application to obtain valid Pricebook2 object IDs for use when configuring PricebookEntry records via the API.

Your client application can perform the following tasks on PricebookEntry objects:

- Query
- Create for the standard pricebook or custom pricebooks.
- Update
- Delete
- Change the `IsActive` field when creating or updating records

PriceBook2, Product2, and PricebookEntry Relationships

In the API:

- Price books are represented by Pricebook2 records (as of version 8.0, the Pricebook object is no longer available).
- Products are represented by Product2 records (as of version 8.0, the Product object is no longer available).
- Each price book contains zero or more entries (represented by PricebookEntry records) that specify the products that are associated with the price book. A price book entry defines the price for which you sell a product at a particular currency.

These objects are defined only for those orgs that have products enabled as a feature. If the org doesn't have the products feature enabled, the Pricebook2 object doesn't appear in the `describeGlobal()` call, and you can't access it via the API.

If you delete a Pricebook2 while a line item references PricebookEntry in the price book, the line item is unaffected, but the Pricebook2 is archived and unavailable from the API.

For a visual diagram of the relationships between Pricebook2 and other objects, see Product and Schedule Objects.

Price Book Setup

The process of setting up a price book via the API usually means:

1. Load product data into Product2 records (creating one Product2 record for each product that you want to add).
2. For each Product2 record, create a PricebookEntry that links the Product2 record to the standard Pricebook2. You need to define a standard price for a product at a given currency (if you have multicurrency enabled), before defining a price for that product in the same currency in a custom price book.
3. Create a Pricebook2 record to represent a custom price book.
4. For each Pricebook2 record, creating a PricebookEntry for every Product2 that you want to add, specifying unique properties for each PricebookEntry (such as the `UnitPrice` and `CurrencyIsoCode`) as needed.

Code Sample—Java

```
public void pricebookSample() {
  try {
    //Create a custom pricebook
    Pricebook2 pb = new Pricebook2();
    pb.setName("Custom Pricebok");
    pb.setIsActive(true);
```

```
    SaveResult[] saveResults = connection.create(new SObject[]{pb});
    pb.setId(saveResults[0].getId());

    // Create a new product
    Product2 product = new Product2();
    product.setIsActive(true);
    product.setName("Product");
    saveResults = connection.create(new SObject[]{product});
    product.setId(saveResults[0].getId());

    // Add product to standard pricebook
    QueryResult result = connection.query(
        "select Id from Pricebook2 where isStandard=true"
    );
    SObject[] records = result.getRecords();
    String stdPbId = records[0].getId();

    // Create a pricebook entry for standard pricebook
    PricebookEntry pbe = new PricebookEntry();
    pbe.setPricebook2Id(stdPbId);
    pbe.setProduct2Id(product.getId());
    pbe.setIsActive(true);
    pbe.setUnitPrice(100.0);
    saveResults = connection.create(new SObject[]{pbe});

    // Create a pricebook entry for custom pricebook
    pbe = new PricebookEntry();
    pbe.setPricebook2Id(pb.getId());
    pbe.setProduct2Id(product.getId());
    pbe.setIsActive(true);
    pbe.setUnitPrice(100.0);
    saveResults = connection.create(new SObject[]{pbe});
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

SEE ALSO:

Product and Schedule Objects

Pricebook2History

Represents historical information about changes that have been made to the standard fields of the associated Pricebook2, or to any custom fields with history tracking enabled. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

This object is always read-only.

Fields

Field	Details
`Pricebook2Id`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Pricebook2 associated with this record.
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the price book field that was modified, or a special value to indicate some other modification to the price book.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). This is a standard system field. Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified price book field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified price book field. Maximum of 255 characters.

Usage

Price book history entries are indirectly created each time a price book is modified.

Two rows are added to this record when foreign key fields change. One row contains the foreign key object names that display in the online application. For example, `Jane Doe` is recorded as the name of a Contact. The other row contains the actual foreign key ID that is only returned to and visible from the API.

This object respects field level security on the parent object.

SEE ALSO:

Pricebook2

PricebookEntry

Represents a product entry (an association between a Pricebook2 and Product2) in a price book.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this price book entry is active (`true`) or not (`false`). Although you can never delete PricebookEntry records, your client application can set this flag to `false`. Inactive PricebookEntry records are hidden in many areas in the user interface. You can change this flag on a PricebookEntry record as often as necessary.
`IsDeleted`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter **Description** Indicates whether this PricebookEntry record has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of this PricebookEntry record. This read-only field references the value in the Name field of the Product2 record. Label is **Product Name**.
`Pricebook2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Pricebook2 record with which this record is associated. This field must be specified when creating Pricebook2 records. It can't be changed in an update.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 record with which this record is associated. This field must be specified when creating Product2 records. It can't be changed in an update.
`ProductCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Product code for this record. This read-only field references the value in the **ProductCode** field of the associated Product2 record.
`UnitPrice`	**Type** currency **Properties** Create, Filter, Sort, Update

Field	Details
	Description Required. Unit price for this price book entry. You can specify a value only if `UseStandardPrice` is set to `false`. Label is **List Price**.
`UseStandardPrice`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this price book entry uses the standard price defined in the standard Pricebook2 record (`true`) or not (`false`). If set to `true`, then the `UnitPrice` field is read-only, and the value will be the same as the `UnitPrice` value in the corresponding PricebookEntry in the standard price book (that is, the PricebookEntry record whose `Pricebook2Id` refers to the standard price book and whose `Product2Id` and `CurrencyIsoCode` are the same as this record). For PricebookEntry records associated with the standard Pricebook2 record, this field must be set to `true`.

Usage

Use this object to define the association between your organization's products (Product2) and your organization's standard price book or to other, custom-defined price books (Pricebook2). Create one PricebookEntry record for each standard or custom price and currency combination for a product in a Pricebook2.

When creating these records, you must specify the IDs of the associated Pricebook2 record and Product2 record. Once created, your client application can't update these IDs.

This object is defined only for those organizations that have products enabled as a feature. If the organization does not have the products feature enabled, then the PricebookEntry object does not appear in the `describeGlobal()` call, and you can't access it.

If you delete a PriceBookEntry while a line item references it, the line item is unaffected, but the PriceBookEntry will be archived and unavailable from the API. Deleted PriceBookEntry records can't be recovered.

You must load the standard price for a product before you are permitted to load its custom price(s).

SEE ALSO:

Object Basics

ProcessDefinition

Represents the definition of a single approval process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Special Access Rules

Only portal and communities users with the Customer Community Plus and Partner Community licenses can access this object.

Fields

Field	Details
`Description`	**Type** string **Properties** Filter, Nillable, Sort **Description** A description of this process, with a maximum of 3,000 characters.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The external name of the process; the name seen by users.
`LockType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of lock applied to the record being approved. When a record is in the approval process, it's always locked, and only an administrator can edit it. However, the currently assigned approver can also be allowed to edit the record. • Total • Admin • Owner • Workitem • Node • none
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** The unique process name, used internally.

Field	Details
`State`	**Type** picklist **Properties** Filter, Group, Sort **Description** The current state of this process. • Active • Inactive • Obsolete
`TableEnumOrId`	**Type** picklist **Properties** Filter, Group, Sort **Description** Specifies the object associated with the approval process, such as Account or Contact.
`Type`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort **Description** The type of this process. • Approval Process—Used to control the action taken for a record. • State-based Process—Used internally to track various control processes, such as for developing Salesforce Knowledge articles.

Usage

Use this object to read the description of an approval process. The definition is read-only.

ProcessInstance

Represents an instance of a single, end-to-end approval process. Use this and the node, step, and workitem process instance objects to create approval history reports.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

For approval process instances that were completed before the Summer '14 rollout, all Process Instance fields are automatically populated, with one exception: `CompletedDate` is never populated for approval process instances that were completed before January 1, 2013. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstance fields are automatically populated, with two exceptions: `CompletedDate` and `LastActorId` are populated only after the approval process instance is complete.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CompletedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The completion date and time of the approval process. The `ElapsedTimeDay`, `ElapsedTimeHours`, and `ElapsedTimeMinutes` field values are calculated using `CompletedDate`.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Sort **Description** The total elapsed time in days between when the approval process instance was started and now.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Sort **Description** The total elapsed time in hours between when the approval process instance was started and now.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Sort

Field	Details
	Description The total elapsed time in minutes between when the approval process instance was started and now.
`LastActorId`	**Type** reference **Properties** Group, Filter, Sort **Description** The last actor that approved, rejected, or recalled the process.
`ProcessDefinitionId`	**Type** reference **Properties** Defaulted on create, Group, Filter, Sort **Description** The ID of this approval process instance.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of this approval process instance, for example Started, Pending, or Approved.
`TargetObjectId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object affected by this approval process instance.

Usage

Use this object to query or retrieve an approval process.

The following SOQL query returns details for all the ProcessInstanceStep records related to individual ProcessInstance records. The nested query references `Steps`, which is the child `relationshipName` for ProcessInstanceStep in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM Steps)
FROM ProcessInstance
```

The following SOQL query returns details for all the ProcessInstanceWorkitem records related to individual ProcessInstance records. The nested query references `Workitems`, which is the child `relationshipName` for ProcessInstanceWorkitem in the ProcessInstance object.

```
SELECT Id, (SELECT Id, ActorId, ProcessInstanceId FROM Workitems)
FROM ProcessInstance
```

ProcessInstanceHistory can help provide a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects.

SEE ALSO:

ProcessInstanceHistory

ProcessInstanceStep

ProcessInstanceWorkitem

ProcessInstanceHistory

This read-only object shows all steps and pending approval requests associated with an approval process (ProcessInstance).

Supported Calls

`describeSObjects()`

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who is currently assigned to this ProcessInstance.
`Comments`	**Type** string **Properties** Filter, Nillable, Sort **Description** Comments for a ProcessInstanceStep. This field doesn't apply to ProcessInstanceWorkitem records.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable, Sort

Field	Details
	Description The total time in days between when the approval process instance was started and when it was completed.
ElapsedTimeInHours	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in hours between when the approval process instance was started and when it was completed.
ElapsedTimeInMinutes	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in minutes between when the approval process instance was started and when it was completed.
IsPending	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the ProcessInstance is pending (`true`) or not (`false`).
OriginalActorId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who was originally assigned this ProcessInstance.
ProcessInstanceId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProcessInstance.

Field	Details
`ProcessNodeId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of this step.
`RemindersSent`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number of reminders that have been sent. Default is 0 (zero).
`StepStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Indicates the current status of the ProcessInstanceStep.
`TargetObjectId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the object being approved.

Usage

This object helps you replicate the related list functionality of the Salesforce user interface for approval processes. Use ProcessInstanceHistory for a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects. You can't queryProcessInstanceHistory. Instead, you can query ProcessInstanceHistory by including it in a nested query on the parent ProcessInstance object. For example, the following SOQL query returns all the ProcessInstanceHistory records related to individual ProcessInstance records. The nested query references `StepsAndWorkitems`, which is the child `relationshipName` for ProcessInstanceHistory in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM StepsAndWorkitems)
FROM ProcessInstance
```

This object respects field-level security on the parent object.

SEE ALSO:

- ProcessInstance
- ProcessInstanceStep
- ProcessInstanceWorkitem

ProcessInstanceStep

Represents one work item in an approval process (ProcessInstance).

> **Note:** Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceStep fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceStep fields are populated only after the approval process instance is next acted upon after the Summer '14 rollout.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who is currently assigned to this approval step.
`Comments`	**Type** string **Properties** Filter, Nillable, Sort **Description** Limit: 4,000 bytes.
`ElapsedTimeInDays`	**Type** double

Field	Details
	Properties Filter, Nillable, Sort **Description** The total time in days since this step was started.
ElapsedTimeInHours	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in hours since this step was started.
ElapsedTimeInMinutes	**Type** double **Properties** Filter, Nillable, Sort **Description** The total time in minutes since this step was started.
OriginalActorId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user who was originally assigned to this approval step.
ProcessInstanceId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProcessInstance that this approval step belongs to.
StepNodeId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the node currently assigned to this approval step.
StepStatus	**Type** picklist

Field	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The current status of this approval step. • Approved • Fault • Held • NoResponse • Pending • Reassigned • Rejected • Removed • Started If the approval step requires unanimous approval and one approver rejects the request, the value of this field for the other approvers changes to NoResponse. Likewise, if approval is based on the first response and an approver responds, the value of this field for the other approvers changes to NoResponse.

Usage

Query or retrieve a new step in an approval process (ProcessInstance).

SEE ALSO:

ProcessInstance

ProcessInstanceHistory

ProcessInstanceWorkitem

ProcessInstanceNode

Represents a step in an instance of an approval process. Compare to ProcessNode, which describes the step in a process definition. Use this object to retrieve approval history.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceNode fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceNode fields are populated only after the approval process instance is next acted upon after the Summer '14 rollout.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`CompletedDate`	**Type** dateTime **Properties** Filter, Sort **Description** The completion date and time of this step in the approval process. The `ElapsedTimeDay`, `ElapsedTimeHours`, and `ElapsedTimeMinutes` field values are calculated using `CompletedDate`.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Sort **Description** The total time in days since this step was started.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Sort **Description** The total time in hours since this step was started.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Sort **Description** The total time in minutes since this step was started.
`LastActorId`	**Type** reference **Properties** Defaulted on create, Group, Filter, Sort **Description** The last actor that approved or rejected this step.

Field	Details
`NodeStatus`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of this approval instance, for example Started, Pending, or Approved.
`ProcessInstanceId`	**Type** reference **Properties** Filter, Group, Sort **Description** The approval process this step is part of.
`ProcessNodeId`	**Type** reference **Properties** Filter, Group, Sort **Description** The identifier for this step.
`ProcessNodeName`	**Type** string **Properties** Filter, Group, Sort **Description** The name of this step.

ProcessInstanceWorkitem

Represents a user's pending approval request.

Note: Exceptions apply to approval history data retrieved with this object and available only via the SOAP API. For each approval process instance that was pending when Summer '14 became available for your organization, some field values are never populated or are populated only after the approval process instance is next acted upon—such as when a user approves, rejects, or reassigns an approval request—after the Summer '14 rollout.

ProcessInstanceWorkitem fields are never populated for approval process instances that were completed before the Summer '14 rollout. For approval process instances that were pending during the Summer '14 rollout, all ProcessInstanceWorkitem fields are populated after the approval process instance is next acted upon after the Summer '14 rollout, with three exceptions: `ElapsedTimeInDays`, `ElapsedTimeInDays`, and `ElapsedTimeInMinutes` fields are never populated in ProcessInstanceWorkitem records for which equivalent ProcessInstanceStep records were created before the Summer '14 rollout.

For all other ProcessInstanceWorkitem records, these three fields are populated after the approval process instance is next acted upon after the Summer '14 rollout.

Note: Because ProcessInstanceHistory combines fields from ProcessInstanceStep and ProcessInstanceWorkitem, you may notice incorrect elapsed times of 0 in ProcessInstanceHistory records because the elapsed time fields were never populated in the related ProcessInstanceWorkitem record.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`ActorId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the user who is currently responsible for approving an approval request.
`ElapsedTimeInDays`	**Type** double **Properties** Filter, Nillable **Description** The total time in days since this approval request was started.
`ElapsedTimeInHours`	**Type** double **Properties** Filter, Nillable **Description** The total time in hours since this approval request was started.
`ElapsedTimeInMinutes`	**Type** double **Properties** Filter, Nillable **Description** The total time in minutes since this approval request was started.
`OriginalActorId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort, Update **Description** ID of the user who was originally assigned this approval request.
`ProcessInstanceId`	**Type** reference **Properties** Filter, Group, Sort, Update **Description** ID of the ProcessInstance associated with this approval request.

Usage

Use this object to manage a pending approval request for a user.

SEE ALSO:

ProcessInstance

ProcessInstanceHistory

ProcessInstanceStep

ProcessNode

Describes a step in a process definition. Compare to ProcessInstanceNode, which describes the step in a running process.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`Description`	**Type** string **Properties** Filter, Nillable, Sort **Description** A description of this node, no longer than 3,000 bytes.

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The external name of the node; the name seen by users.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The unique node name.
ProcessDefinition	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object affected by this approval instance.

Usage

Use this object to get the description of a process definition.

The following SOQL query returns details for all the ProcessInstanceStep records related to individual ProcessInstance records. The nested query references `Steps`, which is the child `relationshipName` for ProcessInstanceStep in the ProcessInstance object.

```
SELECT Id, (SELECT Id, StepStatus, Comments FROM Steps)
FROM ProcessInstance
```

The following SOQL query returns details for all the ProcessInstanceWorkitem records related to individual ProcessInstance records. The nested query references `Workitems`, which is the child `relationshipName` for ProcessInstanceWorkitem in the ProcessInstance object.

```
SELECT Id, (SELECT Id, ActorId, ProcessInstanceId FROM Workitems)
FROM ProcessInstance
```

ProcessInstanceHistory can help provide a unified read-only view of the ProcessInstanceStep and ProcessInstanceWorkitem objects.

Product2

Represents a product that your org sells.

This object has several fields that are used only for quantity and revenue schedules (for example, annuities). Schedules are available only for orgs that have enabled the products and schedules features. If these features aren't enabled, the schedule fields don't appear in the DescribeSObjectResult, and you can't query, create, or update the fields.

Note: Products are represented by Product2 objects. As of API version 8.0, the Product object is no longer available. Requests containing Product are refused, and responses do not contain the Product object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`CanUseQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the product can have a quantity schedule (`true`) or not (`false`). Label is **Quantity Scheduling Enabled**.
`CanUseRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the product can have a revenue schedule (`true`) or not (`false`). Label is **Revenue Scheduling Enabled**.
`ConnectionReceivedId`	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
`ConnectionSentId`	**Type** reference **Properties** Filter, Nillable

Field	Details
	Description ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the org.
`DefaultPrice`	**Type** currency **Properties** Create, Filter, Update **Description** The default price for this record.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A text description of this record. Label is **Product Description**.
`Family`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of the product family associated with this record. Product families are configured as picklists in the user interface. To obtain a list of valid values, call `describeSObjects()` and process the DescribeSObjectResult for the values associated with the `Family` field. Label is **Product Family**.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether this record is active (`true`) or not (`false`). Inactive Product2 records are hidden in many areas in the user interface. You can change the `IsActive` flag on a Product2 object as often as necessary. Label is **Active**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Default name of this record. Label is **Product Name**.
`NumberOfQuantityInstallments`	**Type** int **Properties** Filter, Group, Sort **Description** If the product has a quantity schedule, the number of installments.

Field	Details
NumberOfRevenueInstallments	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** If the product has a revenue schedule, the number of installments.
ProductCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Default product code for this record. Your org defines the product code naming pattern.
QuantityInstallmentPeriod	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** If the product has a quantity schedule, the amount of time covered by the schedule.
QuantityScheduleType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the quantity schedule, if the product has one.
RecalculateTotalPrice	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Changes behavior of OpportunityLineItem calculations when a line item has child schedule rows for the `Quantity` value. When enabled, if the rollup quantity changes, then the quantity rollup value is multiplied against the sales price to change the total price.
RevenueInstallmentPeriod	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field	Details
	Description If the product has a revenue schedule, the period of time covered by the schedule.
`RevenueScheduleType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of the revenue schedule, if the product has one.
`StockKeepingUnit`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The SKU for the product. Use in tandem with or instead of the `ProductCode` field. For example, you can track the manufacturer's identifying code in the Product Code field and assign the product a SKU when you resell it.

Schedule Enabled Flags

When enabling the schedules feature, orgs can decide whether to enable quantity schedules, revenue schedules, or both. In addition, you can use the API to control quantity and revenue scheduling at the product level via the `CanUseQuantitySchedule` and `CanUseRevenueSchedule` flags. A value of `true` for either flag indicates that the product and any OpportunityLineItems can have a schedule of that type. These flags can be set when creating or updating Product2 records.

Default Schedule Fields

The remaining schedule fields for this object define default schedules. Default schedule values are used to create an OpportunityLineItemSchedule when an OpportunityLineItem is created for the Product.

The default schedule fields support the following valid values (all fields are also nillable).

Field	Valid Values
`RevenueScheduleType`	Divide, Repeat
`RevenueInstallmentPeriod`	Daily, Weekly, Monthly, Quarterly, Yearly
`NumberOfRevenueInstallments`	Integer between 1 to 150, inclusive.
`QuantityScheduleType`	Divide, Repeat
`QuantityInstallmentPeriod`	Daily, Weekly, Monthly, Quarterly, Yearly
`NumberOfQuantityInstallments`	Integer between 1 to 150, inclusive

When you attempt to set the schedule fields when creating or updating, the API applies cross-field integrity checks. The integrity requirements are:

- If the schedule type is nil, the installment period and number of installments must be nil.
- If the schedule type is set to any value, then the installment period and number of installments must be non-nil.

Any create or update that fails these integrity checks is rejected with an error.

These default schedule fields, as well as `CanUseQuantitySchedule` and `CanUseRevenueSchedule`, are restricted picklist fields and are available only if the org has the schedules feature enabled.

Usage

Use this object to define the default product information for your org. This object is associated by reference with Pricebook2 objects via PricebookEntry objects. The same product can be represented in different price books as price book entries. In fact, the same product can be represented multiple times (as separate PricebookEntry records) in the same price book with different prices or currencies. A product can only have one price for a given currency within the same price book. To be used in custom price books, all standard prices must be added as price book entries to the standard price book.

You can query the products that have been configured for your org. For example, you can allow your client application to obtain valid product IDs for use when configuring PricebookEntry records via the API. Your client application can perform the following tasks on PricebookEntry objects:

- Query
- Create for the standard pricebook or custom pricebooks.
- Update
- Delete
- Change the `IsActive` field when creating or updating records

This object is defined only for those orgs that have products enabled as a feature. If the org does not have the products feature, this object does not appear in the `describeGlobal()` call, and you can't describe or query this object.

If you try to delete a product via the API but there is an opportunity that uses that product, the delete fails. The workaround is to delete the product in the user interface, which gives you an option to archive the product.

Note: On opportunities and opportunity products, the workflow rules, validation rules, and Apex triggers fire when an update to a child opportunity product or schedule causes an update to the parent record. This means your custom application logic is enforced when there are updates to the parent record, ensuring higher data quality and compliance with your organization's business policies.

SEE ALSO:

Object Basics

Product2Feed

Represents a single feed item in the feed displayed on the detail page for a product record. This object is available in API version 18.0 and later.

A product feed shows recent changes to a product record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to products in Salesforce.

Note: Products are represented by Product2 objects. As of API version 8.0, the Product object is no longer available. Requests containing Product are refused, and responses do not contain the Product object.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Product2 object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of Product2Feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.

Field	Details
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort

Field	Details
	Description Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean

Field	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field.

Field	Details
	When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference

Field	Details
	Properties Filter, Group, Sort **Description** ID of the product record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval. • BasicTemplateFeedItem—Not used. • CanvasPost—a post made by a canvas app posted on a feed.

Field	Details
	• `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values:

Field	Details
	• `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a product record.

SEE ALSO:

Product2

EntitySubscription

NewsFeed

UserProfileFeed

ProductConsumed

Represents an item from your inventory that was used to complete a work order or work order line item in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Note: To create or delete products consumed, you need Create permission on product items.

Fields

Field Name	Details
`Description`	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** Notes and context about the product consumed.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product consumed was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product consumed was last viewed.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Price book associated with the product consumed. If the work order and the product item's associated product are related to the same price book, the Price Book Entry auto-populates based on the product item.
`Product2Id`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Product associated with the product consumed.
`ProductConsumedNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) Auto-generated number identifying the product consumed.

Field Name	Details
ProductItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Product item associated with the product consumed. Creating a product consumed record subtracts the quantity consumed from the linked product item's quantity.
ProductName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name for the product consumed.
QuantityConsumed	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity of products consumed.
QuantityUnitOfMeasure	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Units of the consumed item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
UnitPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The price per unit of the product consumed.
WorkOrderId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** Work order that the product was consumed for.
`WorkOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Work order line item that the product was consumed for.

Usage

When a product is consumed during the completion of a work order, create a product consumed record to track its consumption. You can add products consumed to work orders or work order line items. Track product consumption at the line item level if you want to know which products were used for each line item's tasks.

The way you use products consumed depends on how closely you want to track the state of your inventory in Salesforce. If you want to track the entire life cycle of items in your inventory, including their storage, transfer, and consumption, link your products consumed records to product items. This approach ensures that your inventory numbers auto-update to reflect the consumption of products from your inventory. If you want to track product consumption only, however, specify a Price Book Entry on each product consumed record and leave the Product Item field blank.

ProductEntitlementTemplate

Represents predefined terms of customer support (Entitlement) that users can add to products (Product2).

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`EntitlementTemplateId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the entitlement template. Must be a valid ID.

Field	Details
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 associated with the entitlement template. Must be a valid ID.

Usage

Use to query and manage entitlement templates.

SEE ALSO:

Entitlement

ProductItem

Represents the stock of a particular product at a particular location in field service, such as all bolts stored in your main warehouse.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product item was last modified. Its label in the user interface is Last Modified Date.

Field Name	Details
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product item was last viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Location associated with the product item. This usually indicates where the product item is stored.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The product item's owner.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Product associated with the product item, which represents the type of product in your inventory.
ProductItemNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) Auto-generated number identifying the product item.
ProductName	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description A name for the product item. Try to select a name that indicates what is being stored where; for example, Batteries in Warehouse A.
`QuantityOnHand`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The quantity at the location. If you want to add a serial number, this value must be 1.
`QuantityUnitOfMeasure`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the product item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
`SerialNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A unique number for identification purposes. If you want to enter a serial number, the Quantity on Hand must be 1.

Usage

Each product item is associated with a product and a location in Salesforce. If a product is stored at multiple locations, the product will be tracked in a different product item for each location.

ProductItemTransaction

Represents an action taken on a product item in field service. Product item transactions are auto-generated records that help you track when a product item is replenished, consumed, or adjusted.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** A description of the transaction. The description is blank when the transaction record is created, but can be updated.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
ProductItemId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The associated product item.
ProductItemTransactionNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field Name	Details
	Description (Read Only) Auto-generated number identifying the product item transaction.
Quantity	**Type** double **Properties** Create, Filter, Sort **Description** The quantity of the product item involved in the transaction. If inventory was consumed, the quantity is negative.
RelatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The product consumed or product transfer related to the action. If the action wasn't related to consumption or transfer, the related record is blank.
TransactionType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The action that the transaction tracks. • Replenished: When a part is stocked or restocked at a location. A Replenished transaction is created when a product item is created or a transfer is marked received. • Consumed: When parts are consumed to complete a work order. A Consumed transaction is created when a record is added to the Products Consumed related list on a work order or work order line item. • Adjusted: When there is a discrepancy or a change in consumption. An Adjusted transaction is created when a product item's Quantity on Hand is edited, a product consumed is updated or delete, or a product transfer is deleted. • Transferred: When parts are transferred from one location to another.

ProductRequest

Represents an order for a part or parts in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the product request.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the product request.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A text field for details not recorded in the provided fields.

Field Name	Details
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is delivered.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last modified. Its label in the user interface is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last viewed.
NeedByDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product must be delivered by.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the shipment.
ProductRequestNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field Name	Details
	Description An auto-assigned number that identifies the shipment.
`ShipToAddress`	**Type** address **Properties** Filter, Nillable **Description** The address that the product is to be delivered to.
`ShipToCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city that the product is to be delivered to.
`ShipToCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country that the product is to be delivered to.
`ShipToGeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The accuracy of the geocode for the shipping address.
`ShipToLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the location where the product is to be delivered to.
`ShipToLongitude`	**Type** double

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The longitude of the location where the product is to be delivered to.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the product is to be delivered to.
ShipToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the state where the product is to be delivered to.
ShipToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address where the product is to be delivered to.
ShipmentType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment. The picklist includes the following values by default: • None • Rush • Overnight • Next Business Day • Pick Up
SourceLocationId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The location the product is shipped from.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Status of the product transfer.
`WorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order that the product request is related to.
`WorkOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order line item that the product request is related to.

ProductRequestFeed

Represents a single feed item on an product request record detail page.

A product request feed shows changes to a product request record for fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to product requests in Salesforce.

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Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- “Modify All Data”
- “Modify All” on the Account object
- “Moderate Chatter”

Note: Users with the “Moderate Chatter” permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of ProductRequestFeed. Required when Type is `TextPost`. Optional when Type is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn’t updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn’t counted until it's approved by an admin or a person with “CanApproveFeedPostAndComment” or “ModifyAllData” permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the InsertedBy value is set to the ID of the logged-in user.

Field Name	Details
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort

Field Name	Details
	Description The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the product request record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence.

Field Name	Details
	• `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case

Field Name	Details
	Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

ProductRequestHistory

Represents historical information about changes that have been made to the standard fields of the associated product request, or to any custom fields with history tracking enabled.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the product request field that was modified, or a special value to indicate some other modification to the product request.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified product request field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified product request field. Maximum of 255 characters.
`ProductRequestId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** ID of the product request associated with this record.

Usage

Product request history entries are automatically created each time a product request is modified.

ProductRequestLineItem

Represents a request for a part in field service. Product request line items are components of product requests.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the product request line item.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the product request line item.

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Details not recorded in the provided fields.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is delivered.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
NeedByDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product must be delivered by.
ParentId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The product request that the line item belongs to.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The product associated with the product request line item.
`ProductRequestLineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read Only) An auto-assigned number that identifies the product request line item.
`QuantityRequested`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The amount requested.
`QuantityUnitOfMeasure`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the requested product; for example, grams, liters, or units. The picklist values can be customized.
`ShipToAddress`	**Type** address **Properties** Filter, Nillable **Description** The physical address where the product is needed.

Field Name	Details
ShipToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the product is needed.
ShipToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the product is needed.
ShipToGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the product is needed. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the product is needed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with Latitude to specify the precise geolocation of the address where the product is needed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the product is needed.
ShipToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the product is needed.
ShipToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the product is needed.
ShipmentType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment. The picklist includes the following values, which can be customized: • Rush • Overnight • Next Business Day • Pick Up

Field Name	Details
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Where the product is at the time of the request.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the shipment. The picklist includes the following values, which can be customized: • `Draft` • `Submitted` • `Received`
`WorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order for which the product is needed.
`WorkOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order line item for which the product is needed.

ProductRequestOwnerSharingRule

Represents the rules for sharing a product request with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A product request owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ProductRequestShare

Represents a sharing entry on a product request object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Level of access that the User or Group has to the product request.. The possible values are: • `Read` • `Edit` • `All` This value is not valid when creating or updating these records.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the product request associated with the sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write a value in this field when its value is either omitted or set to `Manual` (default). Values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Lead with them. • `Owner`—The User is the owner of the Lead. • `Rule`—The User or Group has access via a Lead sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the product request. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit product requests owned by other users.

If you attempt to create a record that matches an existing record, the existing record is returned.

ProductRequired

Represents a product that is needed to complete a work order or work order line item in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product required was last modified. Its label in the user interface is Last Modified Date.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product required was last viewed.
`ParentRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order or work order line item that the product is required for.
`ParentRecordType`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description Indicates whether the parent record is a work order or a work order line item.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The required product.
ProductName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the product required.
ProductRequiredNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) Auto-generated number identifying the product required.
QuantityRequired	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Quantity required of the product.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the required product; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.

Usage

Required products can be added to work types, work orders, and work order line items to ensure that the assigned service resource arrives with the right equipment.

Adding required products to work types saves you time and keeps your business processes consistent. Work orders and work order line items inherit their work type's required products. For example, if all light bulb replacement jobs require a ladder and a light bulb, add the ladder and light bulb as required products to your Light Bulb Replacement work type. When it's time to create a work order for a customer's light bulb replacement, applying that work type to the work order adds the required products.

ProductTransfer

Represents the transfer of inventory between locations in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Details not recorded in the provided fields.
`DestinationLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The place the product is to be delivered.
`ExpectedPickupDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Date the product is expected to be picked up.
IsReceived	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Checkbox identifying that the product was received.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last modified. Its label in the user interface is Last Modified Date.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the product request was last viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Owner of the product transfer.
Product2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product associated with the product transfer.
ProductRequestId	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Lookup field for the product request associated with the product transfer.
ProductRequestLineItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product request line item associated with the product transfer.
ProductTransferNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-assigned number that identifies the product transfer.
QuantityReceived	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Amount of product received at the destination location.
QuantitySent	**Type** double **Properties** Create, Filter, Sort, Update **Description** Amount of product sent from the source location.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The units of the product, for example grams, liters, or units.
ReceivedById	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the contact who received the product at the destination location.
`ReturnOrderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the product transfer.
`ReturnOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The return order line item associated with the product transfer.
`ShipmentExpectedDeliveryDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
`ShipmentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the shipment related to the product transfer.
`ShipmentStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
`ShipmentTrackingNumber`	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
`ShipmentTrackingUrl`	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** Lookup field for the shipment related to the product transfer.
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the source location related to the product transfer.
`SourceProductItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Lookup field for the product item related to the product transfer.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Status of the product transfer.

ProductTransferFeed

Represents a single feed item in the feed displayed on the detail page for a product transfer record.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is TextPost. Optional when `Type` is ContentPost or LinkPost. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The numbers of FeedComments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then `InsertedById` is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>`

Field Name	Details
	• `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` **Note:** In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProfileSkillUser record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed items directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher.

Field Name	Details
	• `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated.

ProductTransferHistory

Represents historical information about changes that have been made to the standard fields of the associated product transfer, or to any custom fields with history tracking enabled.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the product transfer field that was modified, or a special value to indicate some other modification to the order.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** New value of the modified product transfer field. Maximum of 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified product transfer field. Maximum of 255 characters.
`ProductTransferId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the product transfer associated with this record.

ProductTransferOwnerSharingRule

Represents the rules for sharing a product transfer with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.

Field	Details
DeveloperName	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A product transfer owned by a User in the source Group triggers the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
ServiceResourceAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`

Field	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ProductTransferShare

Represents a sharing entry on a product transfer object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the product transfer. The possible values are: • `Read` • `Edit` • `All` This value is not valid when creating or updating these records.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the product transfer associated with the sharing entry.
RowCause	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write a value in this field when its value is either omitted or set to `Manual` (default). Values include: • `Manual`—The User or Group has access because a user with "All" access manually shared the Lead with them. • `Owner`—The User is the owner of the Lead. • `Rule`—The User or Group has access via a Lead sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the product request. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit product transfers owned by other users.

If you attempt to create a record that matches an existing record, the existing record is returned.

Profile

Represents a profile, which defines a set of permissions to perform different operations, such as querying, adding, updating, or deleting information.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `create()`, `retrieve()`, `search()`, `update()` `delete()`

Special Access Rules

- Customer Portal users can't access this object.
- Partner portal users can't access this object.

Fields

Field	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the profile.
IsSsoEnabled	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, users assigned to this profile can delegate username and password authentication to a corporate database instead of the user database.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this profile. Available in API version 29.0 and later.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this profile. Available in API version 29.0 and later.
Name	**Type** string **Properties** Filter, Group, Sort, Update **Description** The name of the profile.
PermissionsShowCompanyNameAsUserBadge	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When on, a user's company name, if available, will be displayed in place of the community role.
`PermissionsPermissionName`	**Type** boolean **Properties** Filter, Update **Description** One field for each permission. If `true`, users assigned to this profile have the named permission. The number of fields varies depending on the permissions for the organization and license type. Tip: To get a list of available permissions in the SOAP API, use `describeSObjects()`.
`UserLicenseId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the UserLicense associated with this profile.
`UserType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The category of user license. Each `UserType` is associated with one or more UserLicense records. Each UserLicense is associated with one or more profiles. In API version 10.0 and later, valid values include: • Standard: user license. This user type also includes Salesforce Platform and Salesforce Platform One user licenses. Label is **Standard**. • PowerPartner: User whose access is limited because he or she is a partner and typically accesses the application through a partner portal or community. Label is **Partner**. • CSPLitePortal: user whose access is limited because he or she is an organization's customer and accesses the application through aCustomer Portal or community. Label is **High Volume Portal**. • CustomerSuccess: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal User**.

Field	Details
	• PowerCustomerSuccess: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy. • CsnOnly: user whose access to the application is limited to Chatter. This user type includes Chatter Free and Chatter moderator users. Label is **Chatter Free**. `UserType` replaces `LicenseType`, which is unavailable as of API version 10.0. In API versions 8.0 and 9.0 `LicenseType` is still available with the following valid values: • AUL: Lightning Platform user license. Label is **Apex Platform**. • AUL1: Lightning Platform user license with only one user. Label is **Apex Platform One**. • Salesforce: Salesforce user license. Label is **Salesforce**. • PackageManager: user who can create and work with managed packages for Salesforce AppExchange. Label is **Package Manager**. • PRM: user whose access is limited because he or she is a partner and typically accesses the application through a partner portal. Label is **Partner**. • CustomerUser: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal User**. • CustomerManager: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy.

Usage

Use the Profile object to query the set of currently configured user profiles in your organization. Your client application can use Profile objects to obtain valid profile IDs for use when querying or modifying users through the API.

In the user interface, profiles can be used to assign user licenses from specific pools (Lightning Platform user license or Salesforce user license, for example). If a user is assigned to a profile with a different license type, the number of available licenses in the old license type pool increases, one per user changed, and decreases by the same amount in the new license type pool.

SEE ALSO:

Object Basics

PermissionSet

ProfileSkill

Represents a profile skill, which describes a user's professional knowledge. This is a global record for the organization, and users are associated through the ProfileSkillUser object.

Note: For information about Life Agent skills, see the Skill topic.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** Description of the profile skill.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp indicating when the current user last viewed a record related to this profile skill. Available in API version 29.0 and later.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp indicating when the current user last viewed this profile skill. Available in API version 29.0 and later.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the profile skill.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the profile skill.
`UserCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of users with the profile skill.

Usage

Use the ProfileSkill object to look up the attributes of a skill that can be assigned to a user. This is a global object and is not owned by any specific user.

ProfileSkillEndorsement

Represents a detail relationship of ProfileSkillUser. An endorsement of a profile skill shows approval and support of another user's publicly declared skill.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the profile skill being endorsed.
`ProfileSkillUserId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the ProfileSkillUser record that is being endorsed.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user ID of the person giving the endorsement.

Usage

Use the ProfileSkillEndorsement object to query about a single endorsement given to a user about a specific skill. Users can't endorse themselves, they can only be endorsed by others unless they are administrators with the "Modify All Data" permission.

ProfileSkillEndorsementFeed

Represents a single feed item in the feed displayed on the detail page for a ProfileSkillEndorsement record. This object is available in API version 34.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is TextPost. Optional when `Type` is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The numbers of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets `Type` to ContentPost.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** string

Field Name	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then InsertedById is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item Body contains rich text. Set IsRichText to true if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • <p> Tip: Though the tag isn't supported, you can use <p> </p> to create lines. • <b> • <code> • <i> • <u> • <s> • • • • <img> The <img> tag is accessible only via the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img>

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProfileSkillEndorsement record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
`Title`	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the FeedItem. When the `Type` is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field Name	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated.

ProfileSkillEndorsementHistory

Represents the history of changes to the fields of a ProfileSkillEndorsement.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The profile skill endorsement changed field.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the profile skill endorsement field.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The old value of the profile skill endorsement field.

Field Name	Details
`ProfileSkillEndorsementId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the profile skill endorsement.

Usage

Use this read-only object to identify changes to a ProfileSkillEndorsement.

ProfileSkillFeed

Represents a single feed item in the feed displayed on the detail page for a profile skill.

A ProfileSkill feed shows recent changes to a ProfileSkill record for any fields that are tracked in feeds, and comments and posts about the record. It is a useful way to stay up-to-date with changes to solutions.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the ProfileSkillFeed. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.

Field Name	Details
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object type to which the FeedItem object is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `Type ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of ProfileSkillFeed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field Name	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Usage

Use this object to track changes for a ProfileSkill record.

ProfileSkillHistory

Represents the history of changes to the fields of a ProfileSkill.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
ProfileSkillId	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the ProfileSkill.

Usage

Use this read-only object to identify changes to a ProfileSkill.

ProfileSkillShare

Represents a sharing entry on a ProfileSkill.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the ProfileSkill. The possible values are: • Read • Edit • All (This value is not valid for create() or update() calls.) This value must be set to an access level that is higher than the organization's default access level for ProfileSkill objects.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values may include: • Manual—The User or Group has access because a user with "All" access manually shared the ProfileSkill with them. • Owner—The User is the owner of the ProfileSkill or is in a role above the ProfileSkill owner in the role hierarchy.
UserOrGroupId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the ProfileSkill.

Usage

This object is read only. It is visible because of constraints to the ProfileSkill object, but it is ignored and does not control which users and groups can view and edit ProfileSkill records owned by other users.

ProfileSkillUser

Represents a detail relationship of User. The object connects profile skills with users.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`EndorsementCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of endorsements.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the skill user.
`ProfileSkillId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the ProfileSkill.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user. This field can’t be changed once it is created.

Usage

Use this object to assign specific skills to specific users. ProfileSkillUser appears on the Overview tab on the Chatter profile page. Users can only create a skill mapping for themselves, they can’t create skill mappings for others unless they are administrators with the “Modify All Data” permission. Additionally, users can only edit this object if they are the context user and are not editing the `UserId` field.

ProfileSkillUserFeed

Represents a single feed item in the feed displayed on the detail page for a ProfileSkillUser record. This object is available in API version 34.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is TextPost. Optional when `Type` is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The numbers of FeedComments associated with this feed item.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets `Type` to ContentPost.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
ContentType	**Type** string

Field Name	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then `InsertedById` is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the ProfileSkillUser record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the FeedItem. When the `Type` is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed items directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field Name	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated.

ProfileSkillUserHistory

Represents the history of changes to the fields of a ProfileSkillUser.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.

Field Name	Details
`ProfileSkillUserId`	**Type** reference **Properties** Filter, Group, Sort **Description** Required. ID of the ProfileSkillUser.

Usage

Use this read-only object to identify changes to a ProfileSkillUser.

PushTopic

Represents a query that is the basis for notifying listeners of changes to records in an organization. This is available from API version 21.0 or later.

Supported Calls

REST: DELETE, GET, PATCH, POST (query requests are specified in the URI)

SOAP: `create()`, `delete()`, `describe()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- This object is only available if Streaming API is enabled for your organization.
- Only users with “Create” permission can create this record.

Fields

Field	Field Type	Description
`ApiVersion`	double	Required. API version to use for executing the query specified in `Query`. It must be an API version greater than 20.0. If your query applies to a custom object from a package, this value must match the package's `ApiVersion`. Example value: 43.0 **Field Properties:** Create, Filter, Sort, Update
`Description`	string	Description of the PushTopic. Limit: 400 characters **Field Properties:** Create, Filter, Sort, Update

Field	Field Type	Description
ID	ID	System field: Globally unique string that identifies a record. **Field Properties:** Default on create, Filter, Group, idLookup, Sort
isActive	boolean	Indicates whether the record currently counts towards the organization's allocation. **Field Properties:** Create, Default on create, Filter, Group, Sort, Update
IsDeleted	boolean	System field: Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`). **Field Properties:** Default on create, Filter, Group, Sort
Name	string	Required. Descriptive name of the PushTopic, such as `MyNewCases` or `TeamUpdatedContacts`. Limit: 25 characters. This value identifies the channel and must be unique. **Field Properties:** Create, Filter, Group, Sort, Update
NotifyForFields	picklist	Specifies which fields are evaluated to generate a notification. Valid values: • `All` • `Referenced` (default) • `Select` • `Where` **Field Properties:** Create, Filter, Sort, Update
NotifyForOperations	picklist	Specifies which record events may generate a notification. Valid values: • `All` (default) • `Create` • `Extended` • `Update` **Field Properties for API version 28.0 and earlier:** Create, Filter, Sort, Update **Field Properties for API version 29.0 and later:** Filter, Sort In API version 29.0 and later, this field is read-only, and will not contain information about delete and undelete events. Use `NotifyForOperationCreate`, `NotifyForOperationDelete`, `NotifyForOperationUndelete` and `NotifyForOperationUpdate` to specify which record events should generate a notification. A value of `Extended` means that neither create or update operations are set to generate events.
NotifyForOperationCreate	boolean	`true` if a create operation should generate a notification, otherwise, `false`. Defaults to `true`. This field is available in API version 29.0 and later.

Field	Field Type	Description
NotifyForOperationDelete	boolean	`true` if a delete operation should generate a notification, otherwise, `false`. Defaults to `true`. Clients must connect using the `cometd/29.0` (or later) Streaming API endpoint to receive delete and undelete event notifications. This field is available in API version 29.0 and later.
NotifyForOperationUndelete	boolean	`true` if an undelete operation should generate a notification, otherwise, `false`. Defaults to `true`. Clients must connect using the `cometd/29.0` (or later) Streaming API endpoint to receive delete and undelete event notifications. This field is available in API version 29.0 and later.
NotifyForOperationUpdate	boolean	`true` if an update operation should generate a notification, otherwise, `false`. Defaults to `true`. This field is available in API version 29.0 and later.
Query	string	Required. The SOQL query statement that determines which record changes trigger events to be sent to the channel. Limit: 1,300 characters **Field Properties:** Create, Filter, Sort, Update

`PushTopic` and Notifications

The PushTopic defines when notifications are generated in the channel. This is specified by configuring the following PushTopic fields:

- PushTopic Queries
- Events
- Notifications

QuantityForecast

Represents a quantity-based forecast.

The API also provides revenue-based forecasts using RevenueForecast.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Requires the "View All Data" permission.
- Customer Portal users can't access this object.

Fields

Field	Details
`Closed`	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. A rollup of opportunities or opportunity line items that have closed in this period.
`Commit`	**Type** double **Properties** Filter, Nillable, Sort **Description** The owner's Commit total.
`CommitComment`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Read-only. The comment entered when the owner edited his or her **Commit** total from the **Adjusted Total** link on the forecast edit page.
`CommitOverride`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Read-only. The owner's override of their own **My Commit** total.
`DefaultRollupCommit`	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The owner's standard **Commit** rollup, including their own opportunities and forecast-level overrides from subordinate users in the role hierarchy.
`DefaultRollupUpside`	**Type** double

Field	Details
	Properties Filter, Nillable, Sort **Description** Read-only. The owner's standard **Best Case** rollup, including their own opportunities and forecast-level overrides from subordinate users in the role hierarchy.
`InvalidationDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Read-only. If not blank, indicates that the rollup numbers for **Forecast Override** fields that represent calculated (summarized) amounts may not be up to date.
`ManagerChoiceCommit`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Read-only. The manager's choice regarding the commit amount: • DefaultRollup: Use the manager's default commit rollup for owner's forecast, which reflects the manager's opportunity forecast overrides. • AcceptForecast (default selection): Accept the forecast owner's **Adjusted Total** commit amount, which may or may not be an override. • ManagerManualOverride: Use the manager's manual override. • OpportunityOnlyRollup: Use the opportunity rollup, including opportunity forecast overrides, but excluding any forecast-level (**Adjusted Total**) overrides.
`ManagerChoiceUpside`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Read-only. The manager's choice regarding the best case amount: • DefaultRollup: Use the manager's default best case rollup for owner's forecast, which reflects the manager's opportunity forecast overrides. • AcceptForecast (default selection): Accept the forecast owner's **Adjusted Total** best case amount, which may or may not be an override. • ManagerManualOverride: Use the manager's manual override. • OpportunityOnlyRollup: Use the opportunity rollup, including opportunity forecast overrides, but excluding any forecast-level (**Adjusted Total**) overrides.

Field	Details
ManagerClosed	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The manager's closed total for the owner's forecast, including any opportunity or opportunity product overrides made by the manager.
ManagerCommit	**Type** double **Properties** Filter, Nillable, Sort **Description** The manager's Commit total.
ManagerCommitOverride	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Read-only. The manager's manual override of the forecast owner's **Commit** total. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerDefaultRollupCommit	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The manager's standard **Commit** rollup for the forecast owner. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerDefaultRollupUpside	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The manager's standard **Best Case** rollup for the forecast owner. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.

Field	Details
ManagerId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read-only. ID of the direct manager of the user who owns this forecast.
ManagerOpportunityRollupCommit	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The manager's view of the forecast owner's opportunity-level **Commit** rollup, ignoring all forecast overrides. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerOpportunityRollupUpside	**Type** double **Properties** Filter, Nillable, Sort **Description** Read-only. The manager's view of the forecast owner's opportunity-level **Best Case** rollup, ignoring all forecast overrides. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerPipeline	**Type** double **Properties** Filter, Nillable, Sort **Description** The manager's pipeline total for the owner's forecast, including any opportunity or opportunity product overrides made by the manager.
ManagerUpside	**Type** double **Properties** Filter, Nillable, Sort **Description** The manager's Best Case total.

Field	Details
ManagerUpsideOverride	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The manager's manual override of the forecast owner's **Best Case** total. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
OpportunityRollupClosed	**Type** double **Properties** Filter, Nillable, Sort **Description** The owner's **Closed** total for his or her opportunities only.
OpportunityRollupCommit	**Type** double **Properties** Filter, Nillable, Sort **Description** The owner's **Commit** total for his or her opportunities only.
OpportunityRollupPipeline	**Type** double **Properties** Filter, Nillable, Sort **Description** The owner's **Pipeline** total for his or her opportunities only.
OpportunityRollupUpside	**Type** double **Properties** Filter, Nillable, Sort **Description** The owner's **Best Case** total for his or her opportunities only.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort

Field	Details
	Description ID of the User who owns this forecast. Required on create.
`PeriodId`	**Type** reference **Properties** Filter, Nillable, Group, Sort **Description** The ID of the Period that contains the `StartDate`.
`Pipeline`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total pipeline rollup from subordinates in the role hierarchy, including the owner's opportunities.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort **Description** The value chosen in the Product Family picklist, which can be configured from the object management settings for products. This field is relevant if you have chosen Product Families as the Forecast Type in Forecasts Settings. If you are not forecasting by product family or if the forecast represents opportunities that are not associated with a product family, then this field is blank. Required on create.
`Quota`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The quota amount for the period. You can create, update, upsert, and delete. Requires the “Modify All Data” and “Manage Users” permission. Required on create.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort

Field	Details
	Description The start date of this forecast. The ID of the Period that contains this date is written to the `PeriodId` field if it changes. A new Period is created if none exists. Required on create.
`Upside`	**Type** currency **Properties** Filter, Nillable **Description** The owner's **Best Case** total.
`UpsideComment`	**Type** string **Properties** Filter, Nillable, Update **Description** The comment entered when the owner edited his or her **Best Case** total.
`UpsideOverride`	**Type** double **Properties** Filter, Nillable, Update **Description** Read only. The owner's override of their own My **Best Case** total.

Usage

Query this object to support customizable forecasts based on quantities.

You can update one field, `Quota`, which means that you can mass update sales users' quotas instead of updating them one by one in the user interface. Editing `Quota`, which means that you can mass update sales users' quotas instead of updating them one by one in the user interface. Editing `Quota` requires the "Modify All Data" and "Manage Users" permissions.

The rollup fields always reflect opportunity and opportunity product overrides by the forecast owner or one of the forecast owner's subordinates in the role hierarchy. In addition, the manager rollup fields include overrides by the forecast owner's direct manager in the role hierarchy.

Some of the rollup fields ignore forecast-level (**Adjusted Total**) overrides, but they never ignore opportunity forecast overrides that are visible to the owner or manager.

SEE ALSO:

RevenueForecast

QuantityForecastHistory

QuantityForecastHistory

Represents historical information about quantity-based forecasts that have been submitted (saved) in the user interface.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Requires the "View All Data" permission.
- Customer Portal users can't access this object.

Fields

Field	Details
`Closed`	**Type** double **Properties** Filter, Nillable, Sort **Description** The closed amount of the forecast.
`Commit`	**Type** double **Properties** Filter, Nillable, Sort **Description** The commit amount of the forecast.
`CommitComments`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Comments about the commit value.
`CommitOverridden`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the commit value was overridden (`true`) or not (`false`).
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`ForecastOverrideId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the related forecast override.
`Pipeline`	**Type** double **Properties** Filter, Nillable, Sort **Description** The pipeline amount of the forecast.
`Quota`	**Type** currency **Properties** Filter, Nillable **Description** The quota amount of the forecast.
`Upside`	**Type** currency **Properties** Filter, Nillable **Description** The best case amount of the forecast.
`UpsideComments`	**Type** string

Field	Details
	Properties Filter, Nillable **Description** Comments about the upside value.
`UpsideOverridden`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the upside value was overridden (`true`) or not (`false`).

Usage

This is a read-only object specific to customizable forecasting.

When a user submits a revenue-based forecast in the user interface, a new record is created. If the same forecast is ever resubmitted, additional records are added. The `CreatedDate` of a record reflects the day on which the forecast was submitted. This object respects field level security on the parent object.

SEE ALSO:

QuantityForecast

RevenueForecastHistory

QueueRoutingConfig

Represents the settings that determine how work items are routed to agents. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. For example, you might give phone calls a capacity percentage of `100`. If an agent receives a phone call, the agent won't receive new work items until the call ends, because at that point the agent's capacity will have reached 100%. This field is available in API version 33.0 and later.
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if an agent has a capacity of `6`, and cases are assigned a capacity weight of `2`, an agent can be assigned up to 3 cases before the agent is at capacity and can't receive new work items. This field is available in API version 33.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence status.

Field	Details
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the presence status.
OverflowAssigneeId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user or queue that's set as the Overflow Assignee.
PushTimeout	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The number of seconds set for push timeout. **0** is returned when push timeout isn't enabled. Available in API version 36.0 and later.
RoutingModel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The routing type that determines how work items are routed (pushed) to agents. Possible values are `Least Active` and `Most Available`.
RoutingPriority	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The priority in which work items from the service channels that are related to this routing configuration are routed to agents. Work items from routing configurations that have lower priority values (for example, *0*) are routed to agents first.
ServiceChannelId	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the service channel that's associated with this configuration.

Question

Represents a question in a community that users can view and reply to.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`BestReplyId`	**Type** reference **Properties** Filter, Group, Nillable, Sort, Update **Description** The ID of the Reply that has been identified as the best answer to the question. You must use the user interface to identify the best answer for a question.
`BestReplySelectedById`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the User who selected the best answer to the question. This field is available in API version 24.0 and later. In API version 24.0 through version 29.0, you must update this field using the UI. In API version43.0 and later, you can update this field using the API.
`Body`	**Type** textarea **Properties** Create, Nillable, Update

Field	Details
	Description Description of the question.
CommunityId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The zone ID associated with the question. Once you create a question, you can't change the zone ID associated with that question.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorSmallPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
HasSingleFieldForContent	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the content of a Chatter Answers question is: • Included in only one field: `Title` if the content is unformatted and less than 255 characters; or `Body` if the content is formatted or more than 255 characters (`true`) • Included in two fields: `Title` and `Body` (`false`) This field also determines if content displays in one or two fields in Chatter Answers question feeds. This field is available in API version 25.0 and later.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastReplyDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time the last reply (child Reply object) was posted.
`LastReplyId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read only. The ID of the last reply (child Reply object) posted to the question.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`MostReportAbusesOnReply`	**Type** int

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The most number of user-reported abuses on a Reply associated with the question. This field is available in API version 24.0 and later.
`NumReplies`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of replies (child Reply object) that users have submitted for the question.
`NumReportAbuses`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of user-reported abuses on the question. This field is available in API version 24.0 and later.
`NumSubscriptions`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of users following the question. This field is available in API version 24.0 and later.
`Origin`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The source of the question, such as `Chatter Answers`. This field is available in API version 24.0 and later.
`Title`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field	Details
	Description The descriptive title of the question.
`UpVotes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of up votes for the question.
`VoteScore`	**Type** double **Properties** Filter , Nillable, Sort **Description** The internal score of the question, used to sort questions and articles on the Popular tab in the application user interface. The internal algorithm that determines the score gives older votes less weight than newer votes, simulating exponential decay. The score itself does not display in the application user interface. Note: Unlike other fields of type double, you can't use a SOQL aggregate function with this field.

Usage

Use this object to track questions in azone.

QuestionDataCategorySelection

A data category selection represents a data category that classifies a question.

This object can be used to associate a question with a data category from a data category group or to query the categorization for a question.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

To create, read or update data category selection, you must have create, read or update permission on the categorized question. Users who can update question can also delete its category selection. Users who can create questions can only select categories visible to their role.

Fields

Field Name	Details
`DataCategoryGroupName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category group which has a category associated with the question.
`DataCategoryName`	**Type** DataCategoryGroupReference **Properties** Create **Description** Unique name of the data category associated with the question.
`ParentId`	**Type** reference **Properties** Create, Filter **Description** ID of the question associated with the data category selection.

Usage

Every question can be categorized in a data category. You can use the QuestionDataCategorySelection object to query and manage question categorization. Client applications can create categorization for a question. They can also delete, query, and retrieve question categorization.

Warning: Even though the API lets you select more than one category for QuestionDataCategorySelection, the Answers tab only supports one data category selection for questions. Selecting multiple categories through QuestionDataCategorySelection may result in unexpected behavior in the Answers tab, such as losing your multiple selections. You should only select one data category when using QuestionDataCategorySelection.

Sample Code—Java

In the following example, the `selectCategory` method adds a category to a question data category selection. The `retrieveCategorySelections` method returns all the categories from a question data category selection.

```
public void selectCategory(ID parentId, String categoryGroupName, String categoryName) {
    try {
        QuestionDataCategorySelection categorySelection = new
```

```
QuestionDataCategorySelection();

        categorySelection.setParentId(parentId);
        categorySelection.setDataCategoryGroupName(categoryGroupName);
        categorySelection.setDataCategoryName(categoryName);
        binding.create(new SObject[]{categorySelection});
    } catch (RemoteException e) {
        System.out.println("An unexpected error has occurred." + e.getMessage());
    }
}

public String[] retrieveCategorySelections(String parentId) {
    QueryResult qr = null;

    try {
        qr = binding.query("SELECT DataCategoryName FROM QuestionDataCategorySelection
WHERE Id = '" + parentId + "'");
    } catch (RemoteException e) {
        System.out.println("An unexpected error has occurred." + e.getMessage());
    }

    String[] categoryNames = new String[qr.getRecords().length];
    for (int index = 0; index < qr.getRecords().length; index++) {
        categoryNames[index] =
((QuestionDataCategorySelection)qr.getRecords()[index]).getDataCategoryName();
    }

    return categoryNames;
}
```

Salesforce Knowledge uses a similar object for article data category selection. See *Article Type*__DataCategorySelection for SOQL examples using this object.

SEE ALSO:

Article Type__DataCategorySelection

Data Categories

QuestionReportAbuse

Represents a user-reported abuse on a Question in a Chatter Answers community. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the Question from which the user reported abuse.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Question from which the user reported abuse.
`Reason`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The reason the user reported abuse on the Question, such as `Spam`, `Hateful`, or `Inappropriate`.

Usage

Use this object to track user-reported abuse on questions created in a Chatter Answers community.

QuestionSubscription

Represents a subscription for a user following a Question. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
CommunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the zone associated with the Question the user is following. This field can't be updated.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the question subscription.
QuestionCreatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Required. Creation date of the Question which the user is following. This field can't be updated.
QuestionId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the Question which the user is following. This field can't be updated.
SubscriberId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the User who is following the Question. This field can't be updated.

Usage

Things to consider when following a Question:

- A user can only follow questions that they have permission to view.
- Administrators and users with the "Modify All Data" permission can configure other users to follow questions that the other user has read access to.
- Administrators and users with the "Modify All Data" permission can configure users to stop following questions.

Queries on QuestionSubscription:

- Users with the "Read" permission on Question can see which questions other users are following.
- A query must include a LIMIT clause and the limit can't exceed 1,000.
- A query using a `WHERE` clause can only filter by fields on Question.

QueueSobject

Represents the mapping between a queue Group and the sObject types associated with the queue, including custom objects.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object. A queue is a Group whose `Type` is `Queue`. To create a Group, you must have the "Manage Users" permission.

Fields

Field	Details
`QueueId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of a queue.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** A list of object types that can be associated with the queue specified by the `QueueId`.

Usage

Use this object to associate a queue with the sObject that can be associated with the queue, including custom objects.

SEE ALSO:

Object Basics

QuickText

This object stores a snippet of text that allows users to send a quick response to a customer. Use quick text to create greetings, answers to common questions, short notes, and more. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Category`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** A customizable picklist that can be used to group multiple related quick text records together
`Channel`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** A multi-select picklist that can be used to specify where specific quick text messages are available, such as in Life Agent or in the Email publisher in Case Feed.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update

Field Name	Details
	Description The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Message	**Type** textarea **Properties** Create, Filter (unavailable in API version 25.0 and later), Sort (unavailable in API version 25.0 and later), Update **Description** The content of the quick text record
Name	**Type** string **Properties** Create, Filter (unavailable in API version 25.0 and later), Group, Sort (unavailable in API version 25.0 and later), Update **Description** A descriptive label for the quick text record
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User or Queue that owns the quick text record

Usage

Use this object to create and manage the quick text messages available to users. You can categorize multiple quick text records into groups using the Category field. The Category field can also be a parent to multiple custom-dependent Picklist fields to create a hierarchical structure of categories.

QuickTextHistory

Represents changes to field values on a QuickText object. This object is available in API version 24.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The old value of the field that was changed
`QuickTextId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the QuickText that was changed

Usage

Use this object to identify changes to a QuickText.

QuickTextOwnerSharingRule

Represents a rule for sharing a QuickText object with users other than the owner.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Group, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with

Field Name	Details
	a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupID`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. QuickText objects owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** in the user interface.
`UserorGroupID`	**Type** reference **Properties** Create, Filter **Description** The ID representing the target user or group. Target users or groups have access to the QuickText.

Usage

Use this object to manage the sharing rules for a QuickText object.

SEE ALSO:

Metadata API Developer Guide: SharingRules

QuickTextShare

Represents a sharing entry on a QuickText object. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the QuickText. The possible values are: • `Read` • `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This value must be set to an access level that is higher than the organization's default access level for QuickText objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.

Field Name	Details
	Values may include: • `Manual`—The User or Group has access because a user with “All” access manually shared the QuickText with them. • `Owner`—The User is the owner of the QuickText or is in a role above the QuickText owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the QuickText

Usage

This object lets you determine which users and groups can view and edit QuickText records owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

Quote

The Quote object represents a quote, which is a record showing proposed prices for products and services. Available in API version 18.0 and later.

Quotes can be created from and synced with opportunities, and emailed as PDFs to customers

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account that’s associated with the quote.

Field	Details
AdditionalAddress	**Type** address **Properties** Filter, Nillable **Description** Compound form of the additional address. Read-only. See Address Compound Fields for details on compound address fields.
AdditionalCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's additional address. Up to 40 characters allowed.
AdditionalCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's additional address. Up to 80 characters allowed.
AdditionalCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the quote’s additional address.
AdditionalLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with AdditionalLongitude to specify the precise geolocation of an additional address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
AdditionalLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `AdditionalLatitude` to specify the precise geolocation of an additional address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`AdditionalName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Name associated with the quote's additional address. Limited: 255 characters.
`AdditionalPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal Code for the quote's additional address.
`AdditionalState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's additional address. Up to 80 characters allowed.
`AdditionalStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote’s additional address.
`AdditionalStreet`	**Type** textarea **Properties** Create, Filter, Nillable, Group, Sort, Update **Description** Street name for the quote's additional address.
`BillingAddress`	**Type** address

Field	Details
	Properties Filter, Nillable **Description** Compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
`BillingCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's billing address. Up to 40 characters allowed.
`BillingCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's billing address. Up to 80 characters allowed.
`BillingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO country code for the quote’s billing address.
`BillingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`BillingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`BillingName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Entity that the quote is billed to.
`BillingPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal Code for the quote's billing address.
`BillingState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's billing address. Up to 80 characters allowed.
`BillingStateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote’s billing address.
`BillingStreet`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the quote's billing address.
`CanCreateQuoteLineItems`	**Type** boolean

Field	Details
	Properties Create, Defaulted on create, Group **Description** This field is not used.
ContactId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the contact that's associated with the quote.
ContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the contract that's associated with the quote.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a `Pricebook2Id` specified on the quote, then the currency value of this field must match the currency of the PricebookEntry objects that are associated with any quote line items it has. This value is copied from the related Opportunity and can't be changed.
Description	**Type** textarea **Properties** Nillable **Description** Text description of the quote. Limit: 32,000 characters.
Discount	**Type** percent

Field	Details
	Properties Filter, Nillable, Sort **Description** Difference between the sum of the QuoteLineItem record's`Subtotal` and the sum of the QuoteLineItem record's `Discount` totals. Expressed as a percentage.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address of the contact who's associated with the quote.
`ExpirationDate`	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The date when this quote is no longer valid.
`Fax`	**Type** phone **Properties** Create, Filter, Nillable, Update **Description** The fax number for the contact who's associated with the quote.
`GrandTotal`	**Type** currency **Properties** Filter, Nillable **Description** The total price of the quote plus shipping and taxes.
`IsSyncing`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the quote is syncing with an opportunity.

Field	Details
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
LineItemCount	**Type** int **Properties** Filter, Nillable **Description** The number of line items on the quote.
Name	**Type** string **Properties** Create, Filter, idLookup, Update **Description** Required. Name for the quote. Limit: 225 characters.
OpportunityId	**Type** reference **Properties** Create, Filter **Description** ID for the opportunity associated with the quote.
Phone	**Type** phone **Properties** Create, Filter, Nillable, Update

Field	Details
	Description The phone number of the contact who's associated with the quote.
`Pricebook2Id`	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the price book associated with the quote.
`QuoteNumber`	**Type** string **Properties** Defaulted on create, Filter **Description** A system-generated number that identifies the quote.
`QuoteToAddress`	**Type** address **Properties** Filter, Nillable **Description** Compound form of the quote to address. Read-only. See Address Compound Fields for details on compound address fields.
`QuoteToCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the address to send the quote to for approval, such as a third party-agency representing a buyer. Up to 40 characters allowed.
`QuoteToCountry`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the address to send the quote to for approval. Up to 80 characters allowed.

Field	Details
`QuoteToLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `QuoteToLongitude` to specify the precise geolocation of a quote to address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`QuoteToLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `QuoteToLatitude` to specify the precise geolocation of a quote to address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`QuoteToName`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The name of the entity (such as a person or business) that the quote is sent to for approval. Limit: 255 characters.
`QuoteToPostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the address to send the quote to for approval.
`QuoteToState`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the address to send the quote to for approval. Up to 80 characters allowed.

Field	Details
QuoteToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the address to send the quote to for approval.
RecordTypeID	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the record type assigned to the object.
ShippingAddress	**Type** address **Properties** Filter, Nillable **Description** Compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** City for the quote's shipping address. Up to 40 characters allowed.
ShippingCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Country for the quote's shipping address. Up to 80 characters allowed.
ShippingCountryCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description ISO country code for the quote’s shipping address.
ShippingHandling	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The total shipping and handling costs for the quote.
ShippingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
ShippingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
ShippingName	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The name of the entity (such as a person or business) that the quote is sent to for approval.
ShippingPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Postal code for the quote's shipping address.

Field	Details
ShippingState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** State for the quote's shipping address. Up to 80 characters allowed.
ShippingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ISO state code for the quote's shipping address.
ShippingStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Street name for the quote's shipping address.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Update **Description** The status of the quote. The standard options are: • —None— • Draft • Needs Review • In Review • Approved • Rejected • Presented • Accepted • Denied
Subtotal	**Type** currency

Field	Details
	Properties Filter, Nillable **Description** The sum of sales price multiplied by quantity for line items, not including the discount.
`Tax`	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The total taxes for the quote.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable **Description** The total of the quote line items after discounts and before taxes and shipping.

Usage

Use Quote to manage proposed product prices for customers. To update a Quote, your client application needs "Edit" permission.

- Client applications can create, update, delete, and query Attachment records associated with a quote via the API.
- You can sync a quote and its parent Opportunity.

SEE ALSO:

QuoteLineItem

QuoteDocument

Opportunity

QuoteDocument

Represents a quote in document format. Available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field	Details
ContentVersionDocumentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for the document’s version.
CurrencyIsoCode	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a `Pricebook2Id` specified on the quote, then the currency value of this field must match the currency of the PricebookEntry objects that are associated with any quote line items it has.
Discount	**Type** percent **Properties** Filter, Nillable, Sort **Description** The discount for the quote used in the document.
Document	**Type** base64 **Properties** Create, Nillable **Description** The binary data of the document stored in the QuoteDocument object.
GrandTotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** Grand total for the quote used in the document.

Field	Details
`Name`	**Type** string **Properties** Filter, idLookup, Sort **Description** Name of the quote document.
`QuoteId`	**Type** reference **Properties** Create, Filter, GroupSort **Description** ID for the quote used for the document.

Usage

Use the QuoteDocument object to store a document that can be used to present the quote information to the customer.

SEE ALSO:

Quote

QuoteLineItem

QuoteFeed

Represents a single feed item on the quote record detail page. This object is available in API version 39.0 and later.

A quote feed shows changes to a quote record for fields that are tracked in feeds, and posts and comments about the record. It's a useful way to stay up-to-date with changes made to quotes in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Account object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of QuoteFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`ParentId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used.

Field Name	Details
	• `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Usage

Use this object to track changes for a quote record.

QuoteLineItem

The QuoteLineItem object represents a quote line item, which is a member of the list of Product2 products associated with a Quote, along with other information about those line items on that quote. Available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

The user must have "Edit" permissions on Quote records in order to create or update quote line items on a quote. The user must have "Edit" permissions on Quote records to delete a quote line item.

Fields

Field	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist **Description** Available only for organizations enabled for multiples currencies. Contains the ISO code for any currency allowed by the organization. If the organization has multicurrency and a Pricebook2 is specified on the quote (the `Pricebook2Id` field is not blank), then the currency value of this field must match the currency of the PricebookEntry objects for any associated quote line items. This value is copied from the related Quote and can't be changed.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the line item. Limit: 225 characters.
`Discount`	**Type** percent

Field	Details
	Properties Create, Filter, Nillable, Sort **Description** Editable number from 0 to 100.
`HasQuantitySchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the opportunity line item that the quote line item is synced with has a quantity schedule.
`HasRevenueSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the opportunity line item that the quote line item is synced with has a revenue schedule. If this object has a revenue schedule, the `GrandTotal` and `TotalPrice` fields can't be updated. In addition, the `Quantity` field can't be updated if this object has a quantity schedule. The system ignores any attempt to update this field. The update isn't rejected but the updated value is ignored.
`HasSchedule`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the line item uses schedules.
`LineNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Read-only. Automatically generated number identifying the quote line item. In the form of `QL-XXXXX`.
`ListPrice`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Read-only. Corresponds to the `UnitPrice` on the PricebookEntry that is associated with this line item, which can be in the standard price book or a custom price book. A client application can use this information to show whether the unit price (or sales price) of the line item differs from the price book entry list price.
`OpportunityLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** ID of the related opportunity line item. This field is populated by the API during creation of the quote line item. Not editable. Available in API version 40.0 and later.
`PricebookEntryId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated PricebookEntry. Exists only for orgs with Products enabled. In API 38.0 and earlier, if `Product2Id` is populated with `PricebookEntryId` data, you receive an error message. In API 39.0 and later, `Product2Id` is made null, and `PricebookEntryId` is populated with the `PricebookEntryId` data.
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the Product2 associated with this QuoteLineItem. In API 38.0 and earlier, if `Product2Id` is populated with `PricebookEntryId` data, you receive an error message. In API 39.0 and later, `Product2Id` is made null, and `PricebookEntryId` is populated with the `PricebookEntryId` data.
`Quantity`	**Type** double **Properties** Create, Filter, Sort, Update **Description** The number of units for the line item.

Field	Details
QuoteId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. ID of the associated Quote.
ServiceDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Date when the product revenue will be recognized and the product quantity will be shipped.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value of where the line item is in the sorted order, such as 1, 2, and so on. The SortOrder value determines the order in which a quote line item displays in the Quote Detail page. Client applications can use this to match the sort order in Salesforce. This field is only available in API versions 21.0 and greater.
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** The line item's `Quantity` multiplied by the `UnitPrice`.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read-only. Calculated by applying the `Discount` to the `Subtotal`. This field is nillable, but you can't set both `TotalPrice` and `UnitPrice` to null in the same update. To insert the `TotalPrice` for a quote line item via the API (given only a unit price and the quantity), calculate this field as the unit price multiplied by the quantity. This field is read-only if the quote line item has a revenue schedule.

Field	Details
UnitPrice	**Type** currency **Properties** Create, Filter, Sort, Update **Description** The price per unit for the quote line item.

Usage

A Quote record can have QuoteLineItem records only if the Quote has a Pricebook2. A QuoteLineItem must correspond to a Product2 that is listed in the quote's Pricebook2.

Note: If the multicurrency option has been enabled, the `CurrencyIsoCode` field is present. It can't be modified, it is always set to the value of the `CurrencyIsoCode` of the parent Quote.

Effects on Quotes

Quotes that have associated QuoteLineItem objects are affected in the following ways:

- Creating a QuoteLineItem increments the Quote value by the `TotalPrice` of the QuoteLineItem.
- When you create or update a QuoteLineItem, the API verifies that the line item corresponds to a PricebookEntry in the Pricebook2 that is associated with the quote.

SEE ALSO:

Quote

QuoteDocument

Opportunity

QuoteOwnerSharingRule

Represents a rule for sharing a Quote with users other than the owner. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. Quotes owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. The target user or group is being given access.

QuoteShare

Represents a sharing entry on a Quote. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the Quote. The possible values are: • `Read` • `Edit` • `All`—This value is not valid when creating, updating, or deleting records. This field must be set to an access level that’s higher than the org’s default access level for Quotes.
`ParentId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the parent.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). There are many possible values, including: • `Rule`—The User or Group has access via a Quote sharing rule. • `ImplicitChild`—The User or Group has access to the Quote via sharing access on the associated Account. • `Manual`—The User or Group has access because a User with “All” access manually shared the Quote with them. • `Owner`—The User is the owner of the Quote.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the Quote. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit Quote records owned by other users.

RecentlyViewed

Represents records that the current user has recently viewed or referenced (by viewing a related record).

Supported Calls

`query()`, `update()update()`

Special Usage Rules

The RecentlyViewed object does not support the Task, Report, KnowledgeArticle, and Article objects.

Fields

Field	Details
`Alias`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The alias on the record.
`Email`	**Type** email **Properties** Filter, Group, Nillable, Sort **Description** The email address on the record.
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The first name on the record. If the recently viewed record is a user, this is the user's first name.
`Id`	**Type** ID **Properties** Defaulted on create, Filter, Group, Sort **Description** The ID of the recently viewed record.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the recently viewed record is an active user (`true`) or not (`false`). This field contains a value only if the recently viewed record is a user.

Field	Details
`LastName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The last name on the record.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name on the recently viewed record. If the recently viewed record is a user, contact, or lead, the value is a concatenation of the `firstname` and `lastname` field values.
`NetworkId`	**Type** reference **Properties** Filter,Group, Nillable, Sort **Description** ID of the community that this group is part of. This field is available only if Salesforce Communities is enabled in your organization. You can add a `NetworkId` only when creating a group. You can't change or add a `NetworkId` for an existing group. This field is available in API version 27.0 and later.
`Phone`	**Type** phone

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The phone number on the record.
`ProfileId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** If the recently viewed record is a user, this is the user's profile ID.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** If the recently viewed record is a user, this is the title of the user; for example CFO or CEO.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted, picklistSort **Description** The sObject type for this recently viewed record. Valid values include any standard or custom objects that RecentlyViewed supports.
`UserRoleId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user role associated with this object.

Usage

This object provides a heterogeneous list of different object types and consists of recently viewed records or records that were recently referenced (a related record was viewed). A record is considered viewed when the user sees the details associated with it, but not when the user sees it in a list with other records. Use this object to programmatically construct a list of recently viewed items specific to the current user, for example, on a custom user interface or for search auto-complete options. You can also retrieve a filtered list of records by object type (`Type`). The RecentlyViewed data is periodically truncated down to 200 records per object. RecentlyViewed data is retained for 90 days, after which it is removed on a periodic basis.

Use this query in your code to retrieve a list of all the records that were recently viewed. The results are ordered from most to least recent.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE LastViewedDate !=null
ORDER BY LastViewedDate DESC
```

Use this query to retrieve data that was either viewed or referenced, but only for a limited set of objects.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE Type IN ('Account', 'Contact', 'Plan__c')
ORDER BY LastViewedDate DESC
```

This query retrieves a list of all recently viewed contacts with contact-specific fields, such as the contact's account name, and the custom website field. Records are ordered from most to least recent.

```
SELECT Account.Name, Title, Email, Phone, Website__c
FROM Contact
WHERE LastViewedDate != NULL
ORDER BY LastViewedDate DESC
```

RecordAction

Represents a relationship between a record and a flow. Create a RecordAction for every flow you want associated to a particular record. Available in API version 42.0 and later.

Note: Access to the RecordAction object is determined by a user's access to the associated parent record.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`FlowDefinition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required in Lightning Guided Engagement implementations. The developer name of the flow to associate with the record.
`FlowInterviewId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** Optional. The flow interview ID of the paused or completed flow.
Order	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Required. The order of the flow among all flows associated with this record.
Pinned	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. Specifies whether the flow is pinned to the top or bottom of the Guided Action List component. Users can’t delete pinned flows from the Guided Action List, however they can be deleted using the API. The default value is None. • Top • Bottom • None
RecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. Record associated with the flow.
Status	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Required. The current state of the flow. • New • Paused • Complete This field can’t be set in Process Builder.

Usage

The RecordAction object works with the Guided Action List component in Lightning Experience. Although this object can be used to create relationships between records and flows in Salesforce Classic, those relationships can't be displayed in Salesforce Classic.

When a FlowDefinition gets deleted, all RecordAction records associated to that FlowDefinition are deleted as well.

When a Flow is completed, the associated RecordAction is deleted.

If you're using the Guided Action List component to display RecordActions, the deleted RecordActions are removed from the list when the page is refreshed.

For more information about the Guided Action List component and how it works with RecordActions, see the Lightning Guided Engagement Developer Guide.

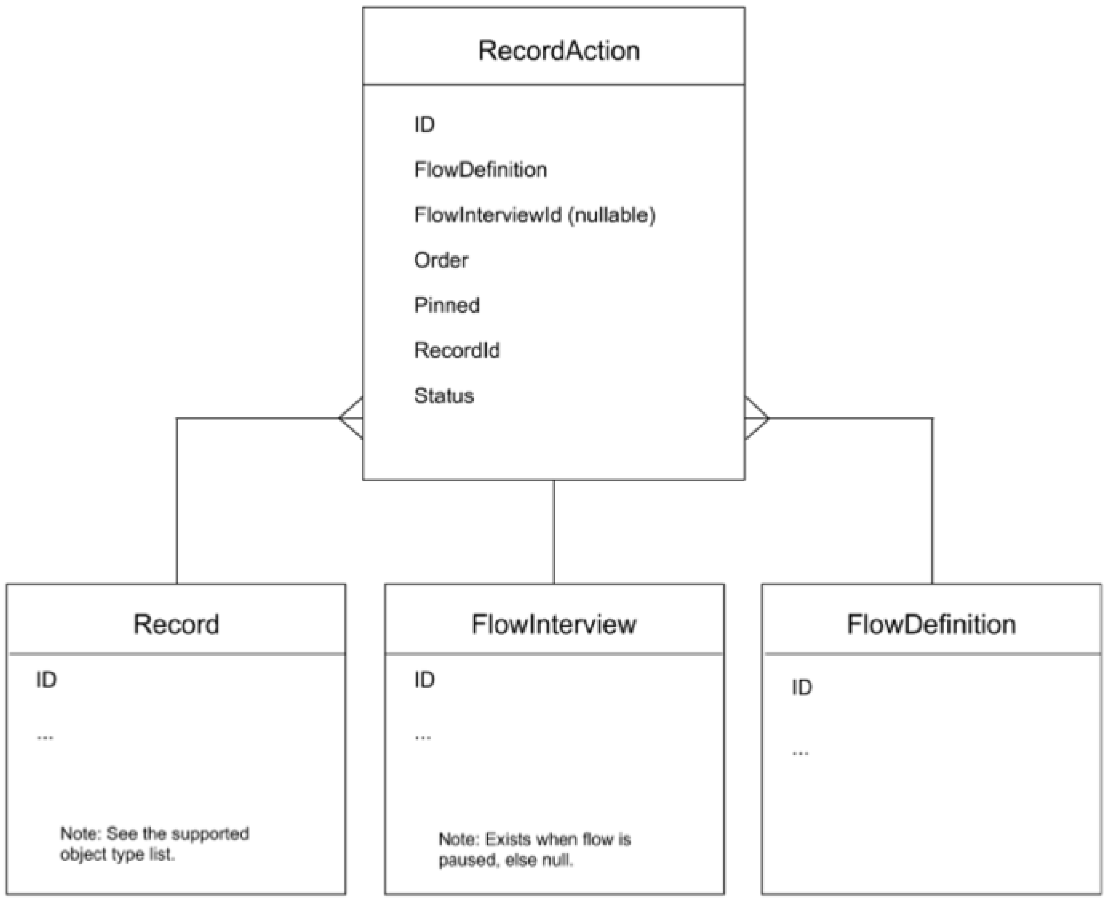
Java Example

Here's an example of how to associate flows to a record using the RecordAction object.

```
public void associateNewCustomerFlowWithAccount(Account a) {
   try {
      RecordAction newRecordAction = new RecordAction();
      newRecordAction.setRecordId(a.getId());
      newRecordAction.setFlowDefinition("New_Customer_Flow");
      newRecordAction.setOrder(1);

      SaveResult[] results = connection
            .create(new SObject[] { newRecordAction });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Data Model



RecordType

Represents a record type.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`BusinessProcessId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description Required for Opportunity and Lead record types in API version 17.0 and later. ID of an associated BusinessProcess.
`Description`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A description of this record. Limit: 255 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Record Type Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether this record is active (`true`) or not (`false`). Only active record types can be applied to records. Label is **Active**.
`IsPersonType`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether this record has been designated as a person account (`true`) or not (`false`). Visible only if the organization has the person account feature enabled.

Field	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Label of the record type in the user interface. Limit: 80 characters. Label is **Record Type Label**.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field’s value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can’t be accessed unless the logged-in user has the “Customize Application” permission.
SobjectType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Object to which this record type applies, including custom objects.

Usage

Use this object to offer different BusinessProcess records and subsets of picklist values to different users based on their Profile. Your client application can describe or query RecordType records.

The following objects have a `RecordTypeId` field:

- Account
- Campaign
- CampaignMember
- Case
- Contact
- Contract
- Lead
- Opportunity
- QuickText
- Solution
- Custom objects

Client applications can create or update values in `RecordTypeId` on these objects, specifying a valid record type ID associated with these objects.

Note: You can't create or update the `RecordTypeId` field on the CampaignMember records. Set the CampaignMember record type using the `CampaignMemberRecordTypeId` field on Campaign.

A client application can retrieve the list of valid record type IDs for a given object by querying the RecordType.

SEE ALSO:

Record Type Objects

RecordTypeLocalization

Represents the translated value of a label for a record type when the Translation Workbench is enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`Language`	**Type** string

Field	Details
	Properties Create, Filter, Nillable, Restricted picklist **Description** The language for this translated label.
NamespacePrefix	**Type** string **Properties** Filter, Nillable **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
ParentId	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the RecordType associated with the label that is being translated.
Value	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated label for the record type. Label is **Translation**.

Usage

Use this object to translate the labels of your record types into other supported languages.

Reply

Represents a reply that a user has submitted to a question in an answers community.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search(), undelete(), update(), upsert()

Fields

Field	Details
Body	**Type** textarea **Properties** Create, Update **Description** Body of this reply.
CommunityId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The zone ID associated with the question and its reply. This field is available in API version 27.0 and later.
CreatorFullPhotoUrl	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's profile photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
CreatorName	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Name of the user who posted the question or reply. Only the first name of internal users (agents) appears to portal users in the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later
`CreatorSmallPhotoUrl`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** URL of the user's thumbnail photo from the feed. Chatter Answers must be enabled to view this field. This field is available in API version 26.0 and later.
`DownVotes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of down votes for a reply.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** When creating a Reply, the `Name` field is automatically populated with a truncated, plain text version of the Reply `Body` field.
`NumReportAbuses`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Represents the number of reported abuses on the reply by users. This field is available in API version 24.0 and later.
`QuestionId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field	Details
	Description ID of the Question to which this reply was made.
`UpVotes`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The total number of up votes for a reply.
`VoteTotal`	**Type** double **Properties** Filter, Nillable, Sort **Description** The total number of all votes for a reply, including up and down votes.

Usage

Use this object to track replies to a Question.

ReplyReportAbuse

Represents a user-reported abuse on a Reply in a Chatter Answers community. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the Reply from which the user reported abuse.

Field	Details
Reason	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The reason the user reported abuse on the Reply, such as `Spam`, `Hateful`, or `Inappropriate`.
ReplyId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Reply from which the user reported abuse.

Usage

Use this object to track user-reported abuse on replies created in a Chatter Answers community.

Report

Represents a report, a set of data that meets certain criteria, displayed in an organized way. Access is read-only. This object is available in API version 20.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Fields

Field	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The description of the report. Limit: 255 characters.
DeveloperName	**Type** string

Field	Details
	Properties Filter, Group, Sort **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **Report Unique Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`FolderName`	**Type** string **Properties** Filter, Nillable, Sort **Description** Name of the folder that contains the report. Available in API version 35.0 and later.
`Format`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort **Description** Required. Indicates the format of the report. This field is available in API version 29.0 and later. Can have one of these values: • **Tabular** for reports in that format. In the application, the label is `Tabular`. • **Summary** for reports in that format. In the application, the label is `Summary`. • **Matrix** for reports in that format. In the application, the label is `Matrix`. • **Multiblock** for reports in joined format. In the application, the label is `Joined`.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastReferencedDate`	**Type** date

Field	Details
	Properties Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastRunDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Returns the date the report was last run. Label is **Last Run**.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Required. The report label used in the user interface.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.

Field	Details
	• In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.
`OwnerId`	**Type** reference **Properties** Filter **Description** The ID of the user who currently owns this report.

Supported Query Scopes

Use these scopes to help specify the data your SOQL query returns.

allPrivate
Records saved in all users' private folders.

Requires the user permission "Manage All Private Reports and Dashboards" and Enhanced Analytics Folder Sharing. If your organziation was created after the Summer '13 release, you already have Enhanced Analytics Folder Sharing. Available in API version 36.0 and later.

created
Records created by the user running the query.

everything
All records except records saved in other users' private folders.

mine
Records saved in the private folder of the user running the query.

organizationOwned
Records saved in Unfiled Public Reports. In Lightning Experience, the Unfiled Public Reports folder is called Public Reports.

Usage

Use the report object to get report metadata. Query, search, or retrieve specific metadata on reports. Report object fields are read-only.

Example: Reports with "Sales" in Their Name

This SOQL query returns reports that contain the name "Sales" and lists their developer names, format, ID, and report name.

```
SELECT DeveloperName,Format,Id,Name FROM Report WHERE Name LIKE '%Sales%'
```

Example: Reports in an Inactive User's Private Folder

This SOQL query returns reports saved in a specific user's private folder.

```
SELECT Id FROM Report USING SCOPE allPrivate WHERE OwnerId = '005A0000000Bc2deFG'
```

SEE ALSO:

ReportFeed

ReportTag

Dashboard

ReportFeed

Represents a single feed item in the feed displayed on a report. This object is available in API version 20.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of ReportFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort

Field	Details
	Description The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string

Field	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.

Field	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the report record. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to retrieve the current contents of the feed fields, such as type of feed or feed ID.

SEE ALSO:

Report

ReportTag

Associates a word or short phrase with a Report. This object is available in API version 20.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference

Field Name	Details
	Properties Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

ReportTag stores the relationship between its parent TagDefinition and the Report being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SEE ALSO:

Report

ReputationLevel

Represents a reputation level defined for a community. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization. Only users with permissions to create or manage a community can view the ReputationPointsRule records.

Fields

Field Name	Details
`Label`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the reputation level.
`LevelNumber`	**Type** int **Properties** Filter, Group, Sort **Description** The rank of the reputation level.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent community (network) the reputation level applies to.
`Threshold`	**Type** double **Properties** Filter, Sort

Field Name	Details
	Description The lower limit of reputation points associated with this reputation level. The maximum number of reputation points a user can accrue is 999,999,999,999,999.

ReputationLevelLocalization

Represents the translated value of a reputation level. Reputation level localization only applies for reputation levels in communities. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization and reputation is enabled in your community.

Fields

Field Name	Details
`Language`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language the reputation level is translated into. The picklist contains the following fully-supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko`

Field Name	Details
	• Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the reputation level this translated value applies to.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the reputation level. Label is **Translation Text**.

ReputationPointsRule

Represents the reputation point rules for a community. Each rule specifies an action that community members can earn points from and the points associated with those actions in a particular community. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

This object is available only if Salesforce Communities is enabled in your organization. Only users with permissions to create or manage a community can view the ReputationPointsRule records.

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the parent community (network) that the point rule applies to.
`Points`	**Type** int **Properties** Filter, Group, Sort **Description** The reputation points associated with the member action this rule is for. The maximum value this field can contain is 999,999.
`Type`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The member action associated with this rule, limited to one of these values: • Write a post • Write a comment • Receive a comment • Like something

Field Name	Details
	• Receive a like • Share a post • Someone shares your post • Mention someone • Receive a mention • Ask a question • Respond to a question • Receive an answer • Mark an answer as best • Your answer is marked as best

ResourceAbsence

Represents a time period in which a service resource is unavailable to work. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled. To create or update resource absences, you need Read permission on service resources. To delete resource absences, you need Edit permission on service resources.

Fields

Field Name	Details
`AbsenceNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) An auto-generated number identifying the absence.
`Address`	**Type** address **Properties** Filter, Nillable

Field Name	Details
	Description The compound form of the address associated with the absence.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address associated with the absence. Maximum length is 40 characters.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address associated with the absence. Maximum length is 80 characters.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the absence.
End	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time when the absence ends.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates.

Field Name	Details
	Note: This field is available in the API only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource absence was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource absence was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address associated with the absence. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. **Note:** This field is available in the API only.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address associated with the absence. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. **Note:** This field is available in the API only.
`Postal Code`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address associated with the absence. Maximum length is 20 characters.
`ResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The absent service resource.
`Start`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date and time when the absence begins.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address associated with the absence. Maximum length is 80 characters.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the address associated with the absence.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The type of absence: *`Meeting`*, *`Training`*, *`Medical`*, or *`Vacation`*. The default value is *`Vacation`*. You can add custom values if needed.

Usage

Resource absences you define periods of time when a service resource is unavailable to work. Unless you're using the Field Service Lightning managed package, service resources can still be assigned to appointments that conflict with their absences.

Tip: Create a trigger that sends an approval request to a supervisor when a service resource creates an absence.

If you're not using the Field Service Lightning managed package, a calendar view isn't available for individual service resources.

ResourceAbsenceFeed

Represents a single feed item on a resource absence record detail page. This object is available in API version 38.0 and later.

A resource absence feed shows changes to tracked fields on a resource absence record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to resource absences in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Resource Absence object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.

Field Name	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the resource absence record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ResourceAbsenceHistory

Represents the history of changes made to tracked fields on a resource absence. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ResourceAbsenceId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the resource absence being tracked. The history is displayed on the detail page for this record.

ResourcePreference

Represents an account's preference for a specified service resource on field service work.

Resource preferences indicate which service resources should be assigned to field service work. You can designate service resources as preferred, required, or excluded on specific accounts or work orders. Work orders inherit their associated account's resource preferences.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource preference was last modified.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource preference was last viewed.
PreferenceType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Resource preference type. Values include: • Preferred: Indicates that the customer would like their field service work assigned to the resource • Required: Indicates that the resource must be assigned to the customer's field service work • Excluded: Indicates that the customer does not want their field service work assigned to the resource Resource preferences serve more as a suggestion than a requirement. You can still assign a service appointment to any resource regardless of the related work order's resource preferences.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order or account with the resource preference.
ResourcePreferenceNumber	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the resource preference.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource that is preferred, required, or excluded.

ResourcePreferenceFeed

Represents a single feed item on a resource preference record detail page.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the ResourcePreference object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.

Field Name	Details
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the resource preference record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkUrl` field is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ResourcePreferenceHistory

Represents the history of changes made to tracked fields on a resource preference.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ResourcePreferenceId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the resource preference being tracked. The history is displayed on the detail page for this record.

ReturnOrder

Represents the return or repair of inventory or products in field service. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce app, the Field Service Lightning mobile app for Android and iOS, and communities built using Salesforce Tabs + Visualforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the return order.
CaseId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the return order.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the return order.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes or context about the return order.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location where the items are being returned to. For example, if the return order tracks the return of products from a technician's van to a warehouse, the warehouse is the destination location.

Field Name	Details
`ExpectedArrivalDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the items are expected to arrive at the destination location.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order was last viewed.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order associated with the return order. When you associated a return order with an order, you can associate the return order's line items with order products.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the return order.
`ProductRequestId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The product request associated with the return order. When you associated a return order with a product request, you can associate the return order's line items with the product request's line items. A return order might be related to a product request if the return order tracks the return of unused products or products to be repaired or replaced. For example, a technician creates a product request for three motors to prepare for a field visit. If the technician finds that only two motors are needed, they can create a return order to return the third to the original location, and list the product request in this field.
`ReturnOrderNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) Auto-generated number identifying the return order.
`ReturnedById`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user returning the items.
`ShipFromAddress`	**Type** address **Properties** Filter, Nillable **Description** The return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
`ShipFromCity`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.

Field Name	Details
ShipFromCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the return shipping address. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the return shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the return shipping address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.

Field Name	Details
ShipFromPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipFromStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
ShipmentType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of shipment associated with the return order. Available values are: • Standard (default value) • Rush • Overnight • Next Business Day • Pickup
SourceLocationId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a technician's service vehicle to a warehouse, the service vehicle is the source location.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the return order. Available values are: • Draft • Submitted • Approved • Canceled • Closed

Usage

You can use return orders to track customer returns, customer repairs, or the return of inventory from a technician's van stock to a warehouse or supplier. Customers can initiate a return from a community, or agents can create return orders in response to a customer call or technician request.

Return orders are composed of return order line items, which allow you to add details about the items being returned. To represent the returned items, each line item must list one or more of the following: product, product item, asset, product request line item, and order product. Return orders can be associated with a product request, case, account, contact, and order if needed. This versatility lets you use return orders to track a wide range of return scenarios.

ReturnOrderFeed

Represents a single feed item on a return order record detail page. This object is available in API version 42.0 and later.

A return order feed shows changes to tracked fields on a return order record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to return orders in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- Modify All Data
- Modify All on the Return Order object
- Moderate Chatter

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.

Field Name	Details
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the return order record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description The type of feed item.

ReturnOrderHistory

Represents the history of changes made to tracked fields on a return order. This object is available in API version 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.

Field Name	Details
ReturnOrderId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the return order being tracked. The history is displayed on the detail page for this record.

Usage

ReturnOrderLineItem

Represents a specific product that is returned or repaired as part of a return order in field service. This object is available in API version 42.0 and later.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce app, the Field Service Lightning mobile app for Android and iOS, and communities built using Salesforce Tabs + Visualforce.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AssetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes or context about the return order line item.
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The location where the items are being returned to. For example, if the return order tracks the return of products from a technician's van to a warehouse, the warehouse is the destination location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order line item was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the return order line item was last viewed.
OrderItemId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order product associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
ProcessingPlan	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** Indicates the preferred fate of the items following their return. Available values are: • Repair—Repair the items and return them to the owner • Discard—Discard the items • Salvage—Salvage the items' working parts • Restock—Return the items to your inventory
`Product2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`ProductItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product item representing the location of the product at the start of the return. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`ProductRequestLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The product request line item associated with the return order line item. One or more of the following fields must be filled out: AssetId, OrderItemId, Product2Id, ProductItemId, and ProductRequestLineItemId.
`QuantityReturned`	**Type** double **Properties** Create, Filter, Sort, Update

Field Name	Details
	Description The quantity of items being returned. If multiple types of products are being returned, track each product in a different return order line item.
QuantityUnitOfMeasure	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Units of the returned items; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
ReasonForReturn	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The reason the items are being returned. Available values are: • Damaged • Defective • Duplicate Order • Wrong Item • Wrong Quantity • Not Satisfied • Outdated • Other
RepaymentMethod	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The method by which the customer or owner will be reimbursed for the items being returned. Available values are: • Replace—The items will be replaced • Refund—The items will be returned and the owner will be refunded • Credit—The items will be returned and the owner will receive credit for them • Return—The items will be returned to the owner (for example, following their repair)

Field Name	Details
`ReturnOrderId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The return order that the return order line item belongs to.
`ReturnOrderLineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) Auto-generated number that identifies the return order line item.
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a technician's service vehicle to a warehouse, the service vehicle is the source location.

ReturnOrderLineItemFeed

Represents a single feed item on a return order line item record detail page. This object is available in API version 42.0 and later.

A return order line item feed shows changes to tracked fields on a return order line item record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to return order line items in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- Modify All Data
- Modify All on the Return Order Line Item object
- Moderate Chatter

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.

Field Name	Details
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the return order line item record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a content post. This field is null for all posts, except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ReturnOrderLineItemHistory

Represents the history of changes made to tracked fields on a return order line item. This object is available in API version 42.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ReturnOrderLineItemId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the return order line item being tracked. The history is displayed on the detail page for this record.

ReturnOrderOwnerSharingRule

Represents the rules for sharing a return order with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 42.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** The ID representing the source group. A return order owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ReturnOrderShare

Represents a sharing entry on a return order. This object is available in API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the return order. The possible values are: • *Read* • *Edit* • *All* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default return order access level.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The return order associated with the sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *Manual* (default). Valid values include: • *Manual*—The user or group has access because a user with "All" access manually shared the return order. • *Owner*—The user is the owner of the return order. • *Team*—The user or group has team access. • *Rule*—The user or group has access via a return order sharing rule.
UserOrGroupId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the return order.

RevenueForecast

Represents a revenue-based forecast.

Use QuantityForecast for quantity-based forecasts.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Closed`	**Type** currency **Properties** Create, Filter **Description** Read only. A rollup of opportunities or opportunity line items that have closed in this period.
`Commit`	**Type** currency **Properties** Filter, Nillable **Description** The owner's Commit total.
`CommitComment`	**Type** string

Field	Details
	Properties Filter, Nillable, Update **Description** Read only. The comment entered when the owner edited his or her Commit total from the Adjusted Total link on the forecast edit page.
`CommitOverride`	**Type** currency **Properties** Filter, Nillable, Update **Description** Read only. The owner's override of their own My Commit total.
`CurrencyIsoCode`	**Type** picklist **Properties** Filter, Restricted picklist, Update **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. You can update or upsert this field and `Quota` only.
`DefaultRollupCommit`	**Type** currency **Properties** Filter, Nillable **Description** Read only. The owner's standard Commit rollup, including their own opportunities and forecast-level overrides from subordinate users in the role hierarchy.
`DefaultRollupUpside`	**Type** currency **Properties** Filter, Nillable **Description** Read only. The owner's standard Best Case rollup, including their own opportunities and forecast-level overrides from subordinate users in the role hierarchy.
`InvalidationDate`	**Type** dateTime

Field	Details
	Properties Filter, Nillable **Description** Read only. If not blank, indicates that the rollup numbers for Forecast Override fields that represent calculated (summarized) amounts may not be up to date.
`ManagerChoiceCommit`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist, Update **Description** Read only. The manager's choice regarding the commit amount: • DefaultRollup: Use the manager's default commit rollup for owner's forecast, which reflects the manager's opportunity forecast overrides. • AcceptForecast (default selection): Accept the forecast owner's Adjusted Total commit amount, which may or may not be an override. • ManagerManualOverride: Use the manager's manual override. • OpportunityOnlyRollup: Use the opportunity rollup, including opportunity forecast overrides, but excluding any forecast-level (Adjusted Total) overrides.
`ManagerChoiceUpside`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist, Update **Description** Read only. The manager's choice regarding the best case amount: • DefaultRollup: Use the manager's default best case rollup for owner's forecast, which reflects the manager's opportunity forecast overrides. • AcceptForecast (default selection): Accept the forecast owner's Adjusted Total best case amount, which may or may not be an override. • ManagerManualOverride: Use the manager's manual override. • OpportunityOnlyRollup: Use the opportunity rollup, including opportunity forecast overrides, but excluding any forecast-level (Adjusted Total) overrides.
`ManagerClosed`	**Type** currency **Properties** Filter, Nillable

Field	Details
	Description Read only. The manager's closed total for the owner's forecast, including any opportunity or opportunity product overrides made by the manager.
ManagerCommit	**Type** currency **Properties** Filter, Nillable **Description** The manager's Commit total.
ManagerCommitOverride	**Type** currency **Properties** Filter, Nillable, Update **Description** Read only. The manager's manual override of the forecast owner's Commit total. Represents an option in the override popup window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerDefaultRollupCommit	**Type** currency **Properties** Filter, Nillable **Description** Read only. The manager's standard Commit rollup for the forecast owner. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerDefaultRollupUpside	**Type** currency **Properties** Filter, Nillable **Description** Read only. The manager's standard Best Case rollup for the forecast owner. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerId	**Type** reference **Properties** Filter, Nillable

Field	Details
	Description Read only. ID of the direct manager of the user who owns this forecast.
ManagerOpportunityRollupCommit	**Type** currency **Properties** Filter, Nillable **Description** The manager's view of the forecast owner's opportunity-level Commit rollup, ignoring all forecast overrides. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerOpportunityRollupUpside	**Type** currency **Properties** Filter, Nillable **Description** The manager's view of the forecast owner's opportunity-level Best Case rollup, ignoring all forecast overrides. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
ManagerPipeline	**Type** currency **Properties** Filter, Nillable **Description** The manager's pipeline total for the owner's forecast, including any opportunity or opportunity product overrides made by the manager.
ManagerTerritoryId	**Type** reference **Properties** Filter, Nillable **Description** ID of the manager's UserRole or Territory.
ManagerUpside	**Type** currency **Properties** Filter, Nillable

Field	Details
	Description The manager's Best Case total.
ManagerUpsideOverride	**Type** currency **Properties** Filter, Nillable, Update **Description** The manager's manual override of the forecast owner's Best Case total. Represents an option in the override pop-up window, which allows managers to choose how to roll up the forecast numbers of a direct report.
OpportunityRollupClosed	**Type** currency **Properties** Filter, Nillable **Description** The owner's Closed total for his or her opportunities only.
OpportunityRollupCommit	**Type** currency **Properties** Filter, Nillable **Description** The owner's Commit total for his or her opportunities only.
OpportunityRollupPipeline	**Type** currency **Properties** Filter, Nillable **Description** The owner's Pipeline total for his or her opportunities only.
OpportunityRollupUpside	**Type** currency **Properties** Filter, Nillable **Description** Read only. The owner's Best Case total for his or her opportunities only.
OwnerId	**Type** reference

Field	Details
	Properties Create, Defaulted on create, Filter **Description** ID of the User who owns this forecast. Required on create.
`PeriodId`	**Type** reference **Properties** Filter, Nillable **Description** The ID of the Period that contains the `StartDate`.
`Pipeline`	**Type** currency **Properties** Filter, Nillable **Description** The total pipeline rollup from subordinates in the role hierarchy, including the owner's opportunities.
`ProductFamily`	**Type** picklist **Properties** Create, Filter, Nillable **Description** The value chosen in the Product Family picklist, which can be configured from the object management settings for products. This field is relevant if you have chosen Product Families as the Forecast Type in Forecasts Settings. If you are not forecasting by product family or if the forecast represents opportunities that are not associated with a product family, then this field is blank. Otherwise, this field is required on create.
`Quota`	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** The quota amount for the period. You can update or upsert this field and `CurrencyIsoCode`, and for Quota only, create. Requires the “Modify All Data” and “Manage Users” permission. Required on create.

Field	Details
StartDate	**Type** date **Properties** Create, Filter, Nillable **Description** The start date of this forecast. The period ID of the period that contains this date is written to the `PeriodId` field if it changes. A new Period is created if none exists. Required on create.
TerritoryId	**Type** reference **Properties** Create, Filter, Nillable **Description** ID of the forecast owner's UserRole or Territory. Required on create if Territory Management is enabled (if this field is available).
Upside	**Type** currency **Properties** Filter, Nillable **Description** The owner's Best Case total.
UpsideComment	**Type** string **Properties** Filter, Nillable, Update **Description** Read only. The comment entered when the owner edited his or her Best Case total. Label is **Best Case Comment**.
UpsideOverride	**Type** currency **Properties** Filter, Nillable, Update **Description** Read only. The owner's override of their My Best Case total. Label is **Best Case Override**.

Usage

Query this object to support customizable forecasts based on revenue. Requires the "View All Data" permission.

You can also update `CurrencyIsoCode` and `Quota`, which means that you can mass update sales users' quotas instead of updating them one by one in the user interface. Editing `Quota` requires "Modify All Data" and "Manage Users" permissions.

The rollup fields always reflect opportunity and opportunity product overrides by the forecast owner or one of the forecast owner's subordinates in the role hierarchy. In addition, the manager rollup fields include overrides by the forecast owner's direct manager in the role hierarchy.

Some of the rollup fields ignore forecast-level (**Adjusted Total**) overrides, but they never ignore opportunity forecast overrides that are visible to the owner or manager.

SEE ALSO:

QuantityForecast

RevenueForecastHistory

Object Basics

RevenueForecastHistory

Represents historical information about revenue-based forecasts that have been submitted (saved) in the user interface.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Requires the "View All Data" permission.
- Customer Portal users can't access this object.

Fields

Field	Details
`Closed`	**Type** currency **Properties** Filter Nillable **Description** The closed amount of the forecast.
`Commit`	**Type** currency

Field	Details
	Properties Filter, Nillable **Description** The commit amount of the forecast.
`CommitComments`	**Type** string **Properties** Filter, Nillable **Description** Comments about the commit value.
`CommitOverridden`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the commit value was overridden (`true`) or not (`false`).
`CurrencyIsoCode`	**Type** picklist **Properties** Defaulted on create, Filter, Restricted picklist **Description** Available only for organizations with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization.
`ForecastOverrideId`	**Type** reference **Properties** Filter **Description** ID of the related forecast override.
`Pipeline`	**Type** currency **Properties** Filter, Nillable **Description** The pipeline amount of the forecast.

Field	Details
Quota	**Type** currency **Properties** Filter, Nillable **Description** The quota amount of the forecast.
Upside	**Type** currency **Properties** Filter, Nillable **Description** The best case amount of the forecast.
UpsideComments	**Type** string **Properties** Filter, Nillable **Description** Comments about the upside value.
UpsideOverridden	**Type** boolean **Properties** Defaulted on create Filter **Description** Indicates whether the upside value was overridden (`true`) or not (`false`).

Usage

This is a read-only object specific to customizable forecasting.

When a user submits a revenue-based forecast in the user interface, a new record is created. If the same forecast is ever resubmitted, additional records are added. The `CreatedDate` of a record reflects the day on which the forecast was submitted. This object respects field-level security on the parent object.

SEE ALSO:

- QuantityForecastHistory
- RevenueForecast
- Object Basics

RuleTerritory2Association

Represents a record-assignment rule and its association to an object, such as Account. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`IsInherited`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates whether the rule is an *inherited* rule (`true`) or a *local* rule (`false`). Rule inheritance flows from the parent territory where the rule is created to the rule's descendent territories (if any) in the territory model hierarchy. A local rule is created within a single territory and affects that territory only.
`RuleId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the rule.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory where the rule was created.

SamlSsoConfig

Represents a SAML Single Sign-On configuration. This object is available in API version 32.0 and later.

Single sign-on is a process that allows network users to access all authorized network resources without having to log in separately to each resource. Single sign-on allows you to validate usernames and passwords against your corporate user database or other client application rather than having separate user passwords managed by Salesforce.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AttributeFormat`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** For SAML 2.0 only and when `identityLocation` is set to `Attribute`. Possible values include `unspecified`, `emailAddress` or `persistent`. All legal values can be found in the “Name Identifier Format Identifiers” section of the Assertions and Protocols SAML 2.0 specification.
`AttributeName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the identity provider’s application. Get this name value from your identity provider.
`Audience`	**Type** string **Properties** Filter, Group, Sort **Description** The Issuer, also called the “Entity ID.” The value is a URL that uniquely identifies the SAML identity provider.
`DeveloperName`	**Type** string

Field Name	Details
	Properties Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package, and the changes are reflected in a subscriber's organization.
`ErrorUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The URL of the page users should be directed to if there's an error during SAML login. It must be a publicly accessible page, such as a public site Visualforce page. The URL can be absolute or relative.
`ExecutionUserID`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The user that runs the Apex handler class. The user must have the "Manage Users" permission. A user is required if you specify a SAML JIT handler class.
`IdentityLocation`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The location in the assertion where a user is identified. Valid values are: • `SubjectNameId`—The identity is in the `<Subject>` statement of the assertion. • `Attribute`—The identity is specified in an `<AttributeValue>`, located in the `<Attribute>` of the assertion.
`IdentityMapping`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The identifier that the service provider uses for the user during Just-in-Time user provisioning. Valid values are: • `Username`—The user's Salesforce username. • `FederationId`—The federation ID from the user object; the identifier that's used by the service provider for the user. • `UserId`—The user ID from the user's Salesforce organization.
`Issuer`	**Type** string **Properties** Filter, idLookup, Group, Sort **Description** Also called the "Entity ID." The value is a URL that uniquely identifies the SAML identity provider.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language for the organization.
`LoginUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** For SAML 2.0 only: The URL where Salesforce sends a SAML request to start the login sequence.
`LogoutUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** For SAML 2.0 only: The URL to direct users to where they click the Logout link. The default is `http://www.salesforce.com`.

Field Name	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The text that's used to identify the Visualforce page in the Setup area of Salesforce.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`OptionsSpInitBinding`	**Type** boolean **Properties** Filter **Description** The service provider initiated request binding, either HTTP Redirect (`true`) or HTTP POST (`false`).
`OptionsUserProvisioning`	**Type** boolean **Properties** Filter

Field Name	Details
	Description If `true`, Just-in-Time user provisioning is enabled, which creates users on the fly the first time that they try to log in. Specify `Federation ID` for the `identityMapping` value to use this feature.
`RequestSignatureMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The method that's used to sign the SAML request. Valid values are: • `RSA-SHA1` • `RSA-SHA256`
`SamlJitHandlerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The name of an existing Apex class that implements the `Auth.SamlJitHandler` interface.
`SingleLogoutBinding`	**Type** string **Properties** Filter, Sort, Nillable **Description** Determines where to put the LogoutRequest or LogoutResponse in the SAML request during single logout (SLO). The value is base64 encoded. Valid values are: • `RedirectBinding` — Sent in the querystring, deflated. • `PostBinding` — Sent in the POST body, not deflated.
`SingleLogoutUrl`	**Type** string **Properties** Filter, Sort, Nillable **Description** The SAML single logout endpoint. This URL is the endpoint where Salesforce sends LogoutRequests (when Salesforce initiates a logout), or LogoutResponses (when the identity provider initiates a logout).

Field Name	Details
`ValidationCert`	**Type** string **Properties** Filter, Sort **Description** The certificate that's used to validate the request. Get this certificate value from your identity provider.
`Version`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The SAML version. Valid values are: • `SAML1_1` • `SAML2_2`

Scontrol

A custom s-control, which is custom content that is hosted by the system but executed by the client application.

Important: Visualforce pages supersede s-controls. Organizations that haven't previously used s-controls can't create them. Existing s-controls are unaffected, and can still be edited. We recommend that you move your s-controls to Visualforce. We continue to support the Scontrol object.

Represents a custom s-control, which is custom content that the system hosts, but client applications execute. An s-control can contain any type of content that you can display or run in a Web browser.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Your organization must be using Enterprise, Developer, or Unlimited Edition and be enabled for custom s-controls.
- Customer Portal users can't access this object.

Fields

Field	Details
`Binary`	**Type** base64 **Properties** Nillable, Update **Description** Binary content of this custom s-control, such as an ActiveX control or a Java archive. Can be specified when created, but not when updated. Limit: 5 MB.
`BodyLength`	**Type** int **Properties** Filter, Group, Sort **Description** The length of the custom s-control. Label is **Binary Length**.
`ContentSource`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies the source of the s-control content, either custom HTML, a snippet (s-controls that are included in other s-controls), or a URL.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** Description of the custom s-control.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With

Field	Details
	this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is **S-Control Name**. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`EncodingKey`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort, Update **Description** Picklist of character set encodings, including ISO-08859-1, UTF-8, EUC, JIS, Shift-JIS, Korean (ks_c_5601-1987), Simplified Chinese (GB2312), and Traditional Chinese (Big5).
`Filename`	**Type** string **Properties** Filter, Group, Nillable, Sort, Update **Description** An uploaded object to display when the custom s-control is added to a custom link. Can be a Java applet, an ActiveX control, or any other type of desired content.
`HtmlWrapper`	**Type** textarea **Properties** Update **Description** Required. HTML page that will be delivered when the user views this custom s-control. This HTML page can be the entire content of the custom s-control, or it can reference the binary. Limit: 1,048,576 characters. Label is **HTML Body**.
`Name`	**Type** string **Properties** Filter, Group, Sort, Update **Description** Required. Name of this custom s-control. Label is **Label**.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`SupportsCaching`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the s-control supports caching (`true`) or not (`false`).

Usage

Use custom s-controls to manage custom content that extends application functionality. All users can view custom s-controls, but the "Customize Application" permission is required to create or update custom s-controls.

SEE ALSO:

Object Basics

ScontrolLocalization

The translated value of the field label for an s-control.

Important: Visualforce pages supersede s-controls. Organizations that haven't previously used s-controls can't create them. Existing s-controls are unaffected, and can still be edited.

When the Translation Workbench is enabled for your organization, provides the translation of the field label of an s-control.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, or Unlimited Edition and be enabled for the Translation Workbench.
- To view this object, you must have the “View Setup and Configuration” permission.

Fields

Field	Details
LanguageLocaleKey	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the Language field.
Language	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages: • Chinese (Simplified): zh_CN • Chinese (Traditional): zh_TW • Danish: da • Dutch: nl_NL • English: en_US • Finnish: fi • French: fr • German: de • Italian: it • Japanese: ja • Korean: ko • Norwegian: no • Portuguese (Brazil): pt_BR

Field	Details
	• Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th` The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi` The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: `sq` • Arabic (Algeria): `ar_DZ` • Arabic (Bahrain): `ar_BH` • Arabic (Egypt): `ar_EG` • Arabic (Iraq): `ar_IQ` • Arabic (Jordan): `ar_JO` • Arabic (Kuwait): `ar_KW` • Arabic (Lebanon): `ar_LB` • Arabic (Libya): `ar_LY` • Arabic (Morocco): `ar_MA` • Arabic (Oman): `ar_OM` • Arabic (Qatar): `ar_QA` • Arabic (Saudi Arabia): `ar_SA`

Field	Details
	• Arabic (Sudan): `ar_SD` • Arabic (Syria): `ar_SY` • Arabic (Tunisia): `ar_TN` • Arabic (United Arab Emirates): `ar_AE` • Arabic (Yemen): `ar_YE` • Armenian: `hy` • Basque: `eu` • Bosnian: `bs` • Bengali: `bn` • Catalan: `ca` • Chinese (Simplified—Singapore): `zh_SG` • Chinese (Traditional—Hong Kong): `zh_HK` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU` • English (Canada): `en_CA` • English (Hong Kong): `en_HK` • English (India): `en_IN` • English (Ireland): `en_IE` • English (Malaysia): `en_MY` • English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • French (Belgium): `fr_BE` • French (Canada): `fr_CA` • French (Luxembourg): `fr_LU` • French (Switzerland): `fr_CH` • Georgian: `ka` • German (Austria): `de_AT` • German (Belgium): `de_BE` • German (Luxembourg): `de_LU` • German (Switzerland): `de_CH` • Hindi: `hi` • Icelandic: `is` • Irish: `ga` • Italian (Switzerland): `it_CH` • Latvian: `lv` • Lithuanian: `lt`

Field	Details
	• Luxembourgish: `lb` • Macedonian: `mk` • Malay: `ms` • Maltese: `mt` • Romanian (Moldova): `ro_MD` • Montenegrin: `sh_ME` • Romansh: `rm` • Serbian (Cyrillic): `sr` • Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO` • Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Tagalog: `tl` • Tamil: `ta` • Urdu: `ur` • Welsh: `cy` The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Nillable

Field	Details
	Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ScontrolId`	**Type** reference **Properties** Create, Filter, Nillable **Description** The ID of the Scontrol that is being translated.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** The actual translated field label of the s-control. Label is **Translation**.

Usage

Use this object to translate your s-controls into a supported language. Users with the Translation Workbench enabled can view s-control translations, but either the "Customize Application" or "Manage Translation" permission is required to create or update s-control translations.

SEE ALSO:

CategoryNodeLocalization

WebLinkLocalization

ScratchOrgInfo

Represents a scratch org and its audit log. Use this object to create a scratch org and keep a log of its creation and deletion. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AdminEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort **Description** The email address of the scratch org's Administration user. The read-only `SignupEmail` field is populated with this value. If you don't provide a value for `AdminEmail`, the field is left blank and the `SignupEmail` is populated with the email address of the org user who is creating this object.
`AuthCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A one-time authorization code that can be exchanged for an OAuth access token and refresh token using standard Salesforce APIs. It's used with `ConnectedAppCallbackUrl` and `ConnectedAppConsumerKey`, when the specified connected app hasn't been configured with an X.509 certificate. This field is read-only.
`ConnectedAppCallbackUrl`	**Type** textarea **Properties** Create **Description** When used with `ConnectedAppConsumerKey`, specifies a connected app that is approved automatically during the scratch org creation.
`ConnectedAppConsumerKey`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** When used with `ConnectedAppCallbackUrl`, specifies a connected app that is approved automatically during the scratch org creation.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The two-character, upper-case ISO-3166 country code. You can find a full list of these codes at several sites, such as: www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html. The language of the scratch org is auto-determined based on the value of this field. If you do not specify a value, this field defaults to the Dev Hub's country code.
`DeletedBy`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user who requested that the scratch org be deleted. This field is read-only.
`DeletedDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date when the `DeletedBy` user requested that the scratch org be deleted. This field is read-only.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** A free-form text field for you to enter a description of this scratch org.
`DurationDays`	**Type** int

Field Name	Details
	Properties Create, Filter, Nillable, Group, Sort **Description** Number of days after which the scratch org expires. Valid values are 1 to 30. The default is 7.
`Edition`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The org edition of this scratch org. Valid values are `Group`, `Developer`, `Enterprise`, and `Professional`.
`ErrorCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The error code if the scratch org creation isn't successful. This field is read-only.
`ExpirationDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** Date when the scratch org expires. This field is read-only.
`Features`	**Type** textarea **Properties** Create, Nillable **Description** A semi-colon delimited list of the features enabled in this scratch org, such as MultiCurrency. See the *Salesforce DX Developer Guide* for the full list of valid features.
`HasSampleData`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description Specifies whether the scratch org contains sample data. If set to `true`, the sample data is similar to the data in a Salesforce free trial org.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the scratch org being created. Specify the language using a language code listed under "Supported Languages" in the Salesforce Help. For example, use `zh_CN` for simplified Chinese. The value you select overrides the language set by locale. If you don't specify a value, the language is based on the `Country` used during scratch org creation. If you don't specify a value for `Country`, the value defaults to the Dev Hub's country.
`LastLoginDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The date of the last user login to the scratch org. This field is read-only.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last referenced. This field is read-only.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date this scratch org was last viewed. This field is read-only.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort

Field Name	Details
	Description The auto-generated ID of this scratch org. This field is read-only.
Namespace	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The namespace you want to associate with this scratch org. The value of this field corresponds to the NamespacePrefix field of the NamespaceRegistry object that describes your namespace.
OrgName	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the scratch org.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who created this scratch org.
ScratchOrg	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The org ID of the scratch org. This field is read-only.
SignupCountry	**Type** string **Properties** Filter, Group, Sort **Description** The country code of the scratch org. This field is populated with the value of the Country field. If you didn't provide a value for Country, it's the country code of the Dev Hub. This field is read-only.

Field Name	Details
SignupEmail	**Type** email **Properties** Filter, Group, Sort **Description** The email address of the scratch org’s Administration user. This field is populated with the value of the `AdminEmail` field. If you didn't provide a value for `AdminEmail`, it's the email address of your user in the Dev Hub. This field is read-only.
SignupInstance	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce instance on which this scratch org resides. This field is read-only.
SignupLanguage	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of the scratch org. This field is populated with the value of the `Language` field. If you didn’t provide a value for `Language`, it’s the language of the Dev Hub. This field is read-only.
SignupTrialDays	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of days between the scratch org's creation and expiration. This field is read-only.
SignupUsername	**Type** string **Properties** Filter, Group, Sort **Description** The username of the Administration user of this scratch org. This field is populated with the value of the `Username` field. If you didn’t provide a value for `Username`, the value of this field is auto-generated. This field is read-only.

Field Name	Details
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The status of the scratch org, such as active, expired, or deleted. This field is read-only.
`Username`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The username of the Administration user of this scratch org.

SEE ALSO:
ActiveScratchOrg
NamespaceRegistry
Salesforce DX Developer Guide

SearchPromotionRule

Represents a promoted search term, which is one or more keywords that you associate with a Salesforce Knowledge article. When a user's search query includes these keywords, the associated article is returned first in search results. This object is available in API version 31.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

A user must have the "Manage Promoted Search Terms" permission.

Fields

Field Name	Details
`PromotedEntityId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the KnowledgeArticleVersion that the promoted search term is associated with. The article must be in published status.
`Query`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The text of the promoted search term. Maximum length: 100 characters. You can associate the same promoted search term with multiple articles. If the user's search matches the promoted term, all associated articles are promoted in search results, ordered by relevancy. For best results, create promoted search terms selectively and limit the number of articles that are promoted per term.

Usage

Use this object to optimize article search results in Salesforce Knowledge.

SecureAgent

Represents a Secure Agent that connects Salesforce to on-premises external data sources like SharePoint 2010 and 2013. This object is available in API version 32.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with

Field Name	Details
	a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of agent labels in the user interface.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The user-interface name for the agent.
`Priority`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Specifies the order in which this agent is accessed relative to others in a Secure Agent cluster. This field is available in API version 35 and later.
`ProxyUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user profile specific to the agent.
`SecureAgentsClusterId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The ID of a cluster of agents that contains this individual agent. Clusters provide failover protection if an agent on a particular server becomes inaccessible. To edit them, use the SecureAgentsCluster object. This field is available in API version 35 and later.

SecureAgentsCluster

Represents a cluster consisting of several Secure Agents on different servers. Clusters provide failover protection if an agent on a particular server becomes inaccessible. This object is available in API version 35.0 and later.

Secure Agents connect Salesforce to content in on-premises external data sources, such as SharePoint 2010 and 2013. To edit individual agents that are part of a cluster, use the SecureAgent object.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** Describes details about the cluster, providing context to other developers.
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the

Field Name	Details
	object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language of cluster labels in the user interface.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The user-interface name for the cluster.

SecurityCustomBaseline

Provides the ability to read, create, and delete user-defined custom security baselines, which define an org's security standards. This object is available in API version 39.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You must have the "View Health Check" permission to read a custom baseline, and the "Manage Health Check" permission to create, edit, or delete one.

Fields

Field Name	Details
`Baseline`	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** The definition of an org's security settings standards.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Sets the baseline as the default in Security Health Check.
Language	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence status.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label for the category node.
NamespacePrefix	**Type** string

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The namespace prefix associated with the package.

SelfServiceUser

Represents a Contact who has been enabled to use your organization's Self-Service portal, where he or she can obtain online support.

Note: Starting with Spring '12, the Self-Service portal isn't available for new orgs. Existing orgs continue to have access to the Self-Service portal.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. All Self-Service users must be associated with a Contact. The contact's email should match the Self-Service user email. The contact must have a value in the `AccountId` field or an error occurs.
`Email`	**Type** email **Properties** Create, Filter, Group, Sort, Update **Description** Required. Make this the same as the email address for the Contact associated with this SelfServiceUser. Password resets and other system communication will be sent to this email address.

Field	Details
FirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** First name of the Self-Service user.
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Self-Service user is allowed to log in to the Self-Service portal (`true`) or not (`false`). Note that there is no way to delete a Self-Service user. They can only be marked as inactive.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
LanguageLocaleKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. It is the primary language for the user. All on-screen text in the Self-Service portal is displayed in this language.
LastLoginDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the Self-Service user last logged in.
LastName	**Type** string

Field	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. Last name of the Self-Service user.
`LocaleSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. The value of this field affects the formatting and parsing of values, especially numeric values, in the Self-Service portal. Values are two-letter codes that indicate language and sometimes language and country. The codes are based on ISO standards.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`. Limited to 121 characters.
`SuperUser`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this Self-Service user is a super user with additional access on his or her company's Self-Service portal (`true`) or not (`false`).
`TimeZoneSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This is a restricted picklist field. The time zone of a affects the offset used when displaying or entering times in the Self-Service portal.
`Username`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. This contains the name that a Self-Service user enters to log into the Self-Service portal. Value must be unique in your organization. If you try to create or update a user with a duplicate value, the operation is rejected and an error is returned.

Usage

For security reasons, you can't query Self-Service user passwords via the API or the user interface. However, the API allows you to set and reset Self-Service user passwords using the `setPassword()` and `resetPassword()` calls.

SelfServiceUser records created from the API don't cause a notification email to be sent. If you want to notify the user, you must send them an email after creating the user.

SEE ALSO:

Contact

User

ServiceAppointment

Represents an appointment to complete field service work for a customer. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The account associated with the appointment. If the parent record is a work order or work order line item, this field's value is inherited from the parent. Otherwise, it remains blank.

Field Name	Details
ActualDuration	**Type** int **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of minutes that it took the resource to complete the appointment after arriving at the address. When values are first added to the `Actual Start` and `Actual End` fields, the `Actual Duration` is automatically populated to list the difference between the `Actual Start` and `Actual End`. If the `Actual Start` and `Actual End` fields are subsequently updated, the `Actual Duration` field doesn't re-update, but you can manually update it.
ActualEndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual date and time the appointment ended.
ActualStartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual date and time the appointment started.
Address	**Type** address **Properties** Filter **Description** The address where the appointment is taking place. The address is inherited from the parent record if the parent record is a work order or work order line item.
AppointmentNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-assigned number that identifies the appointment.

Field Name	Details
ArrivalWindowEndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The end of the window of time in which the technician is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and End with the customer, but keep the Scheduled Start and End internal-only.
ArrivalWindowStartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The beginning of the window of time in which the technician is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and End with the customer, but keep the Scheduled Start and End internal-only.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the appointment is completed. Maximum length is 40 characters.
ContactId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the parent record. If needed, you can manually update the service appointment contact.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The country where the work order is completed. Maximum length is 80 characters.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the appointment.
`DueDate`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date by which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.
`Duration`	**Type** double **Properties** Create, Nillable, Filter, Sort, Update **Description** The estimated length of the appointment. If the parent record is work order or work order line item, the appointment inherits its parent's duration, but it can be manually updated. The duration is in minutes or hours based on the value selected in the `Duration Type` field.
`DurationType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the Duration: Minutes or Hours.
`EarliestStartTime`	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** The date after which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.

Field Name	Details
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service appointment was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service appointment was last viewed.
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address where the service appointments is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `Latitude` to specify the precise geolocation of the address where the service appointment is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the service appointment.
`ParentRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The parent record associated with the appointment. The parent record can't be updated after the service appointment is created.
`ParentRecordStatusCategory`	**Type** string **Properties** Group, Nillable, Sort **Description** (Read only) The `Status Category` of the parent record. If the parent record is a work order or work order line item, this field is populated; otherwise, it remains blank.
`ParentRecordType`	**Type** string **Properties** Group, Nillable, Sort **Description** (Read only) The type of parent record: Account, Asset, Opportunity, Work Order, or Work Order Line Item.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The postal code where the work order is completed. Maximum length is 20 characters.
`SchedEndTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the appointment is scheduled to end. If you are using the Field Service Lightning managed packages with the scheduling optimizer, this field is populated once the appointment is assigned to a resource. `Scheduled End – Scheduled Start = Estimated Duration`.
`SchedStartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time at which the appointment is scheduled to start. If you are using the Field Service Lightning managed packages with the scheduling optimizer, this field is populated once the appointment is assigned to a resource.
`ServiceTerritoryId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service territory associated with the appointment. If the parent record is a work order or work order line item, the appointment inherits its parent's service territory.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the service appointment is completed. Maximum length is 80 characters.
`Status`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the appointment. The picklist includes the following values, which can be customized: • `None`—Default value. • `Scheduled`—Appointment has been assigned to a service resource. • `Dispatched`—Assigned service resource has been notified about their assignment. • `In Progress`—Work has begun. • `Completed`—Work is complete. • `Cannot Complete`—Work could not be completed. • `Canceled`—Work is canceled, typically before any work began
`StatusCategory`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each `Status` value falls into. The `Status Category` field has seven values which are identical to the default `Status` values. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may decide that it belongs in the *`Cannot Complete`* category. The `Status Category` field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the service appointment is completed.
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description A short phrase describing the appointment.
`WorkTypeId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The work type associated with the service appointment. The work type is inherited from the appointment's parent record if the parent is a work order or work order line item.

Usage

Service appointments always have a parent record, which can be a work order, work order line item, opportunity, account, or asset. The type of parent record tells you about the nature of the service appointment:

- Service appointments on *work orders* and *work order line items* offer a more detailed view of the work being performed. While work orders and work order line items let you enter general information about a task, service appointments are where you add the details about scheduling and ownership.
- Service appointments on *assets* represent work being performed on the asset.
- Service appointments on *accounts* represent work being performed for the account.
- Service appointments on *opportunities* represent work that is related to the opportunity.

ServiceAppointmentFeed

Represents a single feed item on a service appointment record detail page. This object is available in API version 38.0 and later.

A service appointment feed shows changes to tracked fields on a service appointment record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service appointments in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.

Field Name	Details
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service appointment record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceAppointmentHistory

Represents the history of changes made to tracked fields on a service appointment. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ServiceAppointmentId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the service appointment being tracked. The history is displayed on the detail page for this record.

ServiceAppointmentOwnerSharingRule

Represents the rules for sharing a service appointment with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

> Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A service appointment owned by a User in the source Group triggers the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
ServiceAppointmentAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ServiceAppointmentShare

Represents a sharing entry on a service appointment. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the service appointment. The possible values are: • *`Read`* • *`Edit`* • *`All`* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default service appointment access level.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service appointment associated with the sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *`Manual`* (default). Valid values include: • *`Manual`*—The user or group has access because a user with "All" access manually shared the service appointment. • *`Owner`*—The user is the owner of the service appointment. • *`Team`*—The user or group has team access.

Field Name	Details
	• `Rule`—The user or group has access via a service appointment sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the service appointment.

ServiceAppointmentStatus

Represents a possible status of a service appointment in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`ApiName`	**Type** string **Properties** Filter, Group, Sort **Description** The API name of the status value.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on service appointments. Only one status value can be the default.

Field Name	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
`StatusCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on service appointments comes with the following values:

- None—Default value.
- Scheduled—Appointment has been assigned to a service resource.
- Dispatched—Assigned service resource has been notified about their assignment.
- In Progress—Work has begun.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.
- Canceled—Work is canceled, typically before any work began

The ServiceAppointmentStatus object corresponds to the Status field. Adding a value to the Status field—for example, Waiting—creates a service appointment status record, and vice versa.

Note: Service appointments also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may decide that it belongs in the *`Cannot Complete`* category.

The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.

ServiceChannel

Represents a channel of work items that are received from your organization—for example, cases, chats, or leads. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`CapacityPercentage`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percentage of an agent's capacity for work items that's consumed by a specific type of work item from this service channel. For example, you might give phone calls a capacity percentage of `100`. If an agent receives a phone call, the agent won't receive new work items until the call ends, because at that point the agent's capacity will have reached 100%. This field is available in API version 32.0 and earlier. For later API versions, you can set the capacity percentage of work items on the QueueRoutingConfig object.
`CapacityWeight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The amount of an agent's capacity for work items that's consumed by a work item from this service channel. For example, if an agent has a capacity of `6`, and cases are assigned a capacity weight of `2`, an agent can be assigned up to 3 cases before the agent is at capacity and can't receive new work items. This field is available in API version 32.0 and earlier. For later API versions, you can set the capacity weight of work items on the QueueRoutingConfig object.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the service channel.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the service channel.
`RelatedEntity`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Unique, Update **Description** The type of object that's associated with this service channel.

ServiceChannelStatus

Represents the status that's associated with a specific service channel. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
ServiceChannelId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service channel.
ServicePresenceStatusId	**Type** reference **Properties** Create, Filter,Group, Nillable, Sort **Description** The ID of the presence status that's associated with the service channel that's specified by the `ServicePresenceChannelId`.

ServiceContract

Represents a customer support contract (business agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
AccountId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the account associated with the service contract.
ActivationDate	**Type** dateTime

Field	Details
	Properties Filter, Nillable, Sort **Description** The initial day the service contract went into effect (whereas `StartDate` may include a renewal date).
`ApprovalStatus`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Sort **Description** Approval status of the service contract.
`BillingAddress` (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the billing address. Read-only. See Address Compound Fields for details on compound address fields.
`BillingCity`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address. Maximum size is 40 characters.
`BillingCountry`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address. Maximum size is 40 characters.
`BillingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the service contract’s billing address.

Field	Details
BillingLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLongitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
BillingLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `BillingLatitude` to specify the precise geolocation of a billing address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
BillingPostalCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details for the billing address. Maximum size is 20 characters.
BillingState	**Type** string **Properties** Group, Sort, Filter, Nillable **Description** Details for the billing address. Maximum size is 20 characters.
BillingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the service contract's billing address.
BillingStreet	**Type** textarea **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Street address for the billing address.
`ContactId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the Contact associated with the service contract. Must be a valid ID.
`ContractNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** Unique number automatically assigned to the service contract.
`Description`	**Type** textarea **Properties** Nillable **Description** Description of the service contract.
`Discount`	**Type** percent **Properties** Filter, Nillable, Sort **Description** The last day the service contract is in effect. Weighted average of all contract line item discounts on the service contract.
`EndDate`	**Type** date **Properties** Filter, Group, Nillable, Sort **Description** The last day the service contract is in effect.
`GrandTotal`	**Type** currency

Field	Details
	Properties Filter, Nillable, Sort **Description** Total price of the service contract plus shipping and taxes.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`LineItemCount`	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** Number of ContractLineItem records associated with the service contract.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name of the service contract.

Field	Details
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who currently owns the service contract.
ParentServiceContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract's parent service contract, if it has one.
Pricebook2Id	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Pricebook2 associated with the service contract. Must be a valid ID.
RootServiceContractId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level service contract in a service contract hierarchy. Depending on where a service contract lies in the hierarchy, its root could be the same as its parent.
ShippingAddress (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the shipping address. Read-only. See Address Compound Fields for details on compound address fields.
ShippingCity	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Details of the shipping address. Maximum size is 40 characters.
`ShippingCountry`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Details of the shipping address. Country maximum size is 40 characters.
`ShippingCountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code for the service contract's shipping address.
`ShippingLatitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLongitude` to specify the precise geolocation of a shipping address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
`ShippingLongitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `ShippingLatitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
`ShippingPostalCode`	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. Postal code maximum size is 20 characters.

Field	Details
ShippingState	**Type** string **Properties** Create, Filter, Nillable, Update **Description** Details of the shipping address. State maximum size is 20 characters.
ShippingStateCode	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code for the service contract's shipping address.
ShippingStreet	**Type** textarea **Properties** Create, Filter, Nillable, Update **Description** The street address of the shipping address. Maximum of 255 characters.
SpecialTerms	**Type** textarea **Properties** Create, Nillable, Update **Description** Any terms specifically agreed to and tracked in the service contract.
StartDate	**Type** date **Properties** Create, Filter, Nillable, Update **Description** The first day the service contract is in effect.
Status	**Type** picklist **Properties** Filter, Nillable **Description** The status of the service contract, such as Inactive.

Field	Details
Subtotal	**Type** currency **Properties** Filter, Nillable **Description** Total of the service contract line items (products) before discounts, taxes, and shipping are applied.
Tax	**Type** currency **Properties** Create, Filter, Nillable, Update **Description** Total taxes for the service contract.
Term	**Type** int **Properties** Create, Filter, Nillable, Update **Description** Number of months that the service contract is valid.
TotalPrice	**Type** currency **Properties** Filter, Nillable **Description** Total of the contract line items (products) after discounts and before taxes and shipping.

SEE ALSO:

ServiceContractHistory

ServiceContractShare

ServiceContractOwnerSharingRule

ServiceContractFeed

Represents a single feed item in the feed displayed on the detail page for a service contract record. This object is available in API version 23.0 and later.

A service contract feed shows recent changes to a service contract for any fields that are tracked in feeds, and comments and posts about the record. It's a useful way to stay up-to-date with changes to service contracts.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the ServiceContract object
- "Moderate Chatter"

> Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content for the ServiceContractFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.

Field Name	Details
ConnectionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is `ContentPost`. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates multiple posts and comments from another application into a feed, `InsertedById` is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>`

Field Name	Details
	• • <img> The <img> tag is accessible only via the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img> Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LastModifiedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** This field is a standard system field. When a feed item is created, LastModifiedDate is the same as CreatedDate. If a FeedComment is inserted on the feed item, then LastModifiedDate becomes the CreatedDate for the FeedComment. Deleting the FeedComment does not change the LastModifiedDate. Ordering by LastModifiedDate DESC sorts the feed by both the most recent feed item or comment.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service contract record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a ServiceContractFeed object of `Type` `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** Title of the ServiceContractFeed. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.

Field Name	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of ServiceContractFeed: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval. • BasicTemplateFeedItem—Not used. • CanvasPost—a post made by a canvas app posted on a feed. • CollaborationGroupCreated—generated when a user creates a public group. • CollaborationGroupUnarchived—Not used. • ContentPost—a post with an attached file. • CreatedRecordEvent—generated when a user creates a record from the publisher. • DashboardComponentAlert—generated when a dashboard metric or gauge exceeds a user-defined threshold. • DashboardComponentSnapshot—created when a user posts a dashboard snapshot on a feed. • LinkPost—a post with an attached URL. • PollPost—a poll posted on a feed. • ProfileSkillPost—generated when a skill is added to a user's Chatter profile. • QuestionPost—generated when a user posts a question. • ReplyPost—generated when Chatter Answers posts a reply. • RypplePost—generated when a user creates a Thanks badge in Work.com. • TextPost—a direct text entry on a feed. • TrackedChange—a change or group of changes to a tracked field.

Field Name	Details
	• UserStatus—automatically generated when a user adds a post. Deprecated. The following values appear in the Type picklist for all feed objects but apply only to CaseFeed: • AttachArticleEvent—generated event when a user attaches an article to a case. • CallLogPost—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • CaseCommentPost—generated event when a user adds a case comment for a case object. • ChangeStatusPost—generated event when a user changes the status of a case. • ChatTranscriptPost—generated event when Live Agent transcript is saved to a case. • EmailMessageEvent—generated event when an email related to a case object is sent or received. • FacebookPost—generated when a Facebook post is created from a case. Deprecated. • MilestoneEvent—generated when a case milestone is completed or reaches violation status. • SocialPost—generated when a social post is created from a case.
Visibility	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. Visibility can have the following values: • AllUsers—The feed item is available to all users who have permission to see the feed item. • InternalUsers—The feed item is available to internal users only. Note the following exceptions for Visibility: • For record posts, Visibility is set to InternalUsers for all internal users by default. • External users can set Visibility only to AllUsers. • Visibility can be updated on record posts. • The Update property is supported only for feed items posted on records.

Usage

Use this object to track changes for a service contract record.

SEE ALSO:

ServiceContract

ServiceContractHistory

ServiceContractOwnerSharingRule

FeedItem

ServiceContractHistory

Represents the history of changes to the values in the fields on a ServiceContract (customer support agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The name of the field that was changed.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable

Field	Details
	Description The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable **Description** The latest value of the field before it was changed.
`ServiceContractId`	**Type** reference **Properties** Filter **Description** Required. ID of the ServiceContract.

Usage

Use this object to identify changes to a service contract.

This object respects field level security on the parent object.

SEE ALSO:
ServiceContract
ServiceContractShare
ServiceContractOwnerSharingRule

ServiceContractOwnerSharingRule

Represents the rules for sharing a ServiceContract (customer service agreement) with users other than the owner. This object is available in API version 18.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort,

Field Name	Details
	Description The ID representing the source group. Service contracts owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** in the user interface.
`UserorGroupId`	**Type** reference **Properties** Create, Filter **Description** The ID representing the target user or group. Target users or groups are given access.

Usage

Use this object to manage the sharing rules for a service contract. General sharing and territory management-related sharing use this object.

SEE ALSO:

ServiceContract

ServiceContractShare

ServiceContractHistory

Metadata API Developer Guide: SharingRules

ServiceContractShare

Represents a sharing entry on a ServiceContract (customer support agreement). This object is available in API version 18.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Level of access that the User or Group has to the ServiceContract. The possible values are: • Read • Edit • All (This value is not valid for create or update calls.) This field must be set to an access level that is higher than the organization's default access level for service contracts.
ParentId	**Type** reference **Properties** Create, Filter **Description** ID of the parent object, if any.
RowCause	**Type** picklist **Properties** Create, Filter, Defaulted on create, Restricted picklist **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values may include: • Manual—The User or Group has access because a user with "All" access manually shared the ServiceContract with them. • Owner—The User is the owner of the ServiceContract or is in a role above the service contract owner in the role hierarchy.
UserOrGroupId	**Type** reference

Field	Details
	Properties Create, Filter **Description** ID of the User or Group that has been given access to the ServiceContract.

Usage

This object allows you to determine which users and groups can view and edit ServiceContract records owned by other users.

If you attempt to create a new record that matches an existing record, the create call updates any modified fields and returns the existing record.

SEE ALSO:

ServiceContract

ServiceContractHistory

ServiceContractOwnerSharingRule

ServiceCrew

Represents a group of service resources who can be assigned to service appointments as a unit.

A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

Service appointments can only be assigned to service resources. To assign a service crew to service appointments, you must create a service resource with a resource type of Crew that represents the crew, then use the resource for assignment purposes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`CrewSize`	**Type** int

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** The number of members on the crew. This field is manual, so it doesn't auto-update when you add or remove members.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew was last viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the service crew. For example, Repair Crew.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The crew owner. By default, the owner is the person who created the service crew.

ServiceCrewFeed

Represents a single feed item on a service crew record detail page.

A service crew feed shows changes to tracked fields on a service crew record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service crews in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Service Crew object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service crew record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.

Field Name	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceCrewHistory

Represents the history of changes made to tracked fields on a service crew.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The value of the field before it was changed.
`ServiceCrewId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service crew being tracked. The history is displayed on the detail page for this record.

ServiceCrewMember

Represents a technician service resource that belongs to a service crew.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`EndDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last day that the service resource belongs to the crew. You can use this field to track employment dates for contractors.
`IsLeader`	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates that the member is the crew leader.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew member was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service crew member was last viewed.
`ServiceCrewId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The crew that the service resource belongs to.
`ServiceCrewMemberNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the service crew member.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource that belongs to the crew. Only service resources whose resource type is Technician can be added to service crews.

Field Name	Details
StartDate	**Type** dateTime **Properties** Create, Filter, Sort, Update **Description** Required. The day the service resource joins the crew. Service resources can belong to multiple crews as long as their start and end dates don't overlap.

ServiceCrewMemberFeed

Represents a single feed item on a service crew member record detail page.

A service crew member feed shows changes to tracked fields on a service crew member record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service crew members in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Service Crew Member object
- "Moderate Chatter"

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
CommentCount	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the service crew member record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a content post. This field is null for all posts, except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceCrewMemberHistory

Represents the history of changes made to tracked fields on a service crew member.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ServiceCrewMemberId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service crew member being tracked. The history is displayed on the detail page for this record.

ServiceCrewOwnerSharingRule

Represents the rules for sharing a service crew with user records other than the owner or anyone above the owner in the role hierarchy.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A service crew owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
ServiceResourceAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • Read • Edit • All
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ServiceCrewShare

Represents a sharing entry on a service crew.

Supported Calls

create(), delete(), describeSObjects(), query(), retrieve(), update(), upsert()

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AccessLevel	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the service crew. The possible values are: • *Read* • *Edit* • *All* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default service crew access level.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service crew associated with the sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *Manual* (default). Valid values include: • *Manual*—The user or group has access because a user with "All" access manually shared the service crew. • *Owner*—The user is the owner of the service crew. • *Team*—The user or group has team access. • *Rule*—The user or group has access via a service crew sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the service crew.

ServicePresenceStatus

Represents a presence status that can be assigned to a service channel. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the presence status.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label of the presence status.

ServiceReport

Represents a report that summarizes a work order, work order line item, or service appointment.

The fields that appear on a service report are determined by its service report template. Service reports can be signed by the customer and shared as a PDF.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
ContentVersionDocumentId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the service report version, used for storage.
DocumentBody	**Type** base64 **Properties** Create, Nillable **Description** The report output.
DocumentContentType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of data used for the report output: application/pdf.
DocumentLength	**Type** int **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The length of the report output.
DocumentName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The name of the report output, always set to Service Report.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the service appointment, work order, or work order line item that the service report summarizes. For example, if you click **Create Service Report** on a service appointment, this field lists the service appointment's record ID.
ServiceReportNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the service report.
Template	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The service report template used to generate the service report. Note: If the person creating the service report doesn't have access to certain objects or fields that are included in the service report template, those fields won't be visible in the report they create.

ServiceReportLayout

Represents a service report template in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The developer name of the service report template.
Language	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The language that the service report template uses.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the service report template was last viewed.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The name of the service report template. For example, Maintenance Report Template.

ServiceResource

Represents a service technician or service crew in field service. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the resource.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When selected, this option means that the resource can be assigned to work orders. For service tracking purposes, resources can't be deleted, so deactivating a resource is the best way to send them into retirement. Deactivating a user deactivates the related service resource. You can't create a service resource that is linked to an inactive user.
`IsCapacityBased`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Capacity-based resources are limited to a certain number of hours or appointments in a specified time period. Tip: The Capacities related list shows a resource's capacity.

Field Name	Details
IsOptimizationCapable	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** When selected, this option means that the service scheduling optimizer can assign this resource to work orders during the optimization process. Use only if the Field Service Lightning managed packages are installed. Its label in the user interface is `Include in Scheduling Optimization`. Only users with the "Field Service Scheduling" permission set license can be included in scheduling optimization. Optimization isn't available for service crews, so if the service resource has a `Resource Type` of Crew, selecting this option has no results.
LastKnownLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The latitude of the last known location.
LastKnownLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The longitude of the last known location.
LastKnownLocation	**Type** location **Properties** Nillable **Description** The service resource's last known location. You can configure this field to display data collected from a custom mobile app. This field is not visible in the user interface, but you can expose it on service resource page layouts or set up field tracking to be able to view a resource's location history.
LastKnownLocationDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date and time of the last known location.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service resource was last modified. Its label in the user interface is `Last Modified Date`.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the service resource was last viewed.
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The location associated with the service resource. For example, a service vehicle driven by the service resource.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The resource's name. You'll likely want this to be the name or title of the associated user or service crew.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the service resource.

Field Name	Details
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable **Description** The associated user. Its label in the UI is `User`. If the service resource represents a service crew rather than a user, leave the `User` field blank and select the related crew in the `ServiceCrewId` field.
ResourceType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates whether the resource is a Technician, Dispatcher, Crew, or Agent. Resources who are dispatchers can't be capacity-based or included in scheduling optimization. Only users with the "Field Service Dispatcher" permission set license can be dispatchers. Note: You can't add additional resource types.
ServiceCrewId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The associated service crew. If the service resource represents a crew, select the crew. Note: This field is hidden for all users by default. To use it, update its field-level security settings in Setup and add it to your service resource page layouts.

ServiceResourceCapacity

Represents the maximum number of scheduled hours or number of service appointments that a capacity-based service resource can complete within a specific time period. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
CapacityInHours	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The number of hours that the resource can work per time period. You must fill out this field, the `CapacityInWorkItems` field, or both.
CapacityInWorkItems	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The total number of service appointments that the resource can complete per time period. You must fill out this field, the `CapacityInHours` field, or both.
CapacityNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** (Read only) An auto-generated number identifying the capacity record.
EndDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the capacity ends; for example, the end date of a contract.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The associated service resource. You can set multiple capacities for a resource as long as their start and end dates do not overlap.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort **Description** The date the capacity goes into effect.
`TimePeriod`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Days, Hours, or Months. For example, if a resource can work 80 hours per month, the capacity's `Time Period` would be *`Month`* and `Hours per Time Period` would be *`80`*.

Usage

Service resources who are capacity-based can only work a certain number of hours or complete a certain number of service appointments within a specified time period. Contractors tend to be capacity-based. To indicate that a service resource is capacity-based, select **Capacity-Based** on the service resource record, then create a capacity record for the service resource.

You must fill out at least one of these fields: `CapacityInWorkItems` and `CapacityInHours`. If you're using the Field Service Lightning managed package and would like to measure capacity both in hours and in number of work items, enter a value for both. The resource is considered to reach their capacity based on whichever term is met first—hours or number of work items.

Important: If you aren't using the Field Service Lightning managed package, capacity serves more as a suggestion than a rule. Resources can still be as scheduled beyond their capacity, and you aren't notified when a resource exceeds their capacity.

ServiceResourceCapacityFeed

Represents a single feed item on a service resource capacity record detail page. This object is available in API version 38.0 and later.

A service resource capacity feed shows changes to tracked fields on a service resource capacity record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service resource capacities in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.

Field Name	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service resource capacity record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceResourceCapacityHistory

Represents the history of changes made to tracked fields on a service resource capacity record. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and field tracking for service resource capacity fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ServiceResourceCapacityId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service resource capacity being tracked. The history is displayed on the detail page for this record.

ServiceResourceFeed

Represents a single feed item on a service resource record detail page. This object is available in API version 38.0 and later.

A service resource feed shows changes to tracked fields on a service resource record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service resources in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the ServiceResource object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service resource record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkURL` field is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceResourceHistory

Represents the history of changes made to tracked fields on a service resource. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`ServiceResourceId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the service resource being tracked. The history is displayed on the detail page for this record.

ServiceResourceOwnerSharingRule

Represents the rules for sharing a service resource with user records other than the owner or anyone above the owner in the role hierarchy. This object is available in API version 38.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
GroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A service resource owned by a User in the source Group triggers the rule to give access.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
ServiceResourceAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

ServiceResourceShare

Represents a sharing entry on a service resource. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the service resource. The possible values are: • *`Read`* • *`Edit`* • *`All`* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default service resource access level.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service resource associated with the sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *`Manual`* (default). Valid values include: • *`Manual`*—The user or group has access because a user with "All" access manually shared the service resource. • *`Owner`*—The user is the owner of the service resource. • *`Team`*—The user or group has team access.

Field Name	Details
	• `Rule`—The user or group has access via a service resource sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the service resource.

ServiceResourceSkill

Represents a skill that a service resource possesses. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`EffectiveEndDate`	**Type** date **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the skill expires. For example, if a service resource needs to be re-certified after six months, the end date would be the date their certification expires.
`EffectiveStartDate`	**Type** date **Properties** Create, Filter, Sort, Update

Field Name	Details
	Description The date when the service resource gains the skill. For example, if the skill represents a certification, the start date would be the date of certification.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource skill was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the resource skill was last viewed.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service resource who possesses the skill.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The skill the service resource possesses.
`SkillLevel`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The service resource's skill level. Skill level can range from zero to 99.99.
`SkillNumber`	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the resource skill assignment.

Usage

You can assign skills to all service resources in your org to indicate their certifications and areas of expertise, and specify each resource's skill level from 0 to 99.99. For example, you can assign Maria the "Welding" skill, level 50.

If you intend to use the skills feature, determine which skills you want to track and how skill level should be determined. For example, you may want the skill level to reflect years of experience, certification levels, or license classes.

ServiceResourceSkillFeed

Represents a single feed item on a service resource skill record detail page. This object is available in API version 38.0 and later.

A service resource skill feed shows changes to tracked fields on a service resource skill record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service resource skills in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.

Field Name	Details
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the service resource skill record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a content post. This field is null for all posts, except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceResourceSkillHistory

Represents the history of changes made to tracked fields on a service resource skill. This object is available in API version 38.0 and later.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
ServiceResourceSkillId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the resource skill being tracked. The history is displayed on the detail page for this record.

ServiceTerritory

Represents a geographic or functional region in which field service work can be performed. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Address	**Type** address **Properties** Filter **Description** An address to associate with the territory. You may want to list the address of the territory's headquarters.
City	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the associated address. Maximum length is 40 characters.
Country	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country to associate with the territory. Maximum length is 80 characters.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the territory.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field Name	Details
	Description The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the service territory is meant to be used. If a territory is inactive, you can't add members to it or link it to work orders, work order line items, or service appointments.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address associated with the territory. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.

Field Name	Details
Longitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the address associated with the territory. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the territory.
OperatingHoursId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The territory's operating hours, which indicate when service appointments within the territory can occur. Service resources who are members of a territory automatically inherit the territory's operating hours unless different hours are specified on the resource record.
ParentTerritoryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The territory's parent service territory, if it has one. For example, a *Northern California* territory can have a *State of California* territory as its parent. A service territory hierarchy can contain up to 10,000 territories.
PostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The postal code of the address associated with the territory. Maximum length is 20 characters.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address associated with the territory. Maximum length is 80 characters.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the address associated with the territory.
`TopLevelTerritoryId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level territory in a hierarchy of service territories. Depending on where a territory lies in the hierarchy, its top-level territory might be the same as its parent.

Usage

If you want to use service territories, determine which territories you need to create. Depending on how your business works, you may decide to create territories based on cities or counties, or on functional categories such as sales versus service. If you plan to build out a hierarchy of service territories, create the highest-level territories first.

For example, you can create a hierarchy of territories to represent the areas where your team works in California. Include a top-level territory named *`California`*, three child territories named *`Northern California`*, *`Central California`*, and *`Southern California`*, and a series of third-level territories corresponding to California counties. Assign service resources to each county territory to indicate who is available to work in that county.

ServiceTerritoryFeed

Represents a single feed item on a service territory record detail page. This object is available in API version 38.0 and later.

A service territory feed shows changes to tracked fields on a service territory record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service territories in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.

Field Name	Details
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service territory record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceTerritoryHistory

Represents the history of changes made to tracked fields on a service territory. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.

Field Name	Details
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
ServiceTerritoryId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service territory being tracked. The history is displayed on the detail page for this record.

ServiceTerritoryLocation

Represents a location associated with a particular service territory in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
LocationId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The location that is associated with the service territory.
ServiceTerritoryId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The associated service territory.
ServiceTerritoryLocationNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) Auto-generated number identifying the service territory location.

ServiceTerritoryMember

Represents a service resource who can be assigned to service appointments in a service territory. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
Address	**Type** address **Properties** Filter **Description** The member's address. You may want to list the related service resource's address in this field.
City	**Type** string

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The city of the member's address. Maximum length is 40 characters.
Country	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The country of the member's address. Maximum length is 80 characters.
EffectiveEndDate	**Type** date **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the service resource is no longer a member of the territory. If the resource will be working in the territory for the foreseeable future, leave this field blank. This field is mainly useful for indicating when a temporary relocation ends.
EffectiveStartDate	**Type** date **Properties** Create, Filter, Sort, Update **Description** The date when the service resource becomes a member of the service territory.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
LastReferencedDate	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the territory member was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory member was last viewed.
`Latitude`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the member's address. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
`Longitude`	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of the member's address. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
`MemberNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** (Read only) An auto-generated number identifying the service territory member.

Field Name	Details
OperatingHoursId	**Type** reference **Properties** Create, Filter, Group, Sort, Nillable, Update **Description** The operating hours assigned to the service territory member. If no operating hours are specified, the member is assumed to use their parent service territory's operating hours. If a member needs special operating hours, create them in Setup and select them in the `Operating Hours` lookup field on the member's detail page.
PostalCode	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the member's address. Maximum length is 20 characters.
ServiceResourceId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource assigned to the service territory.
ServiceTerritoryId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The service territory that the service resource is assigned to.
State	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The state of the member's address. Maximum length is 80 characters.
Street	**Type** textarea

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The street number and name of the member's address.

`TerritoryType`	**Type**
	picklist
	Properties
	Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update
	Description
	Primary, Secondary, or Relocation.
	• The primary territory is typically the territory where the resource works most often—for example, near their home base. Service resources can only have one primary territory.
	• Secondary territories are territories where the resource can be assigned to appointments if needed. Service resources can have multiple secondary territories.
	• Relocation territories represent temporary moves for service resources. If you're using the Field Service Lightning managed packages with the scheduling optimizer, resources with relocation territories are always assigned to services within their relocation territories during the specified relocation dates; if they don't have a relocation territory, the primary territories are favored over the secondary.
	For example, a service resource might have the following territories:
	• Primary territory: *`West Chicago`*
	• Secondary territories:
	  – *`East Chicago`*
	  – *`South Chicago`*
	• Relocation territory: *`Manhattan`*, for a three-month period

Usage

If you delete a service territory with members, the service resources who were members no longer have any connection to the territory.

ServiceTerritoryMemberFeed

Represents a single feed item on a service territory member record detail page. This object is available in API version 38.0 and later.

A service territory member feed shows changes to tracked fields on a service territory member record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to service territory members in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service territory member record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.

Field Name	Details
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

ServiceTerritoryMemberHistory

Represents the history of changes made to tracked fields on a service territory member. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The value of the field before it was changed.
`ServiceTerritoryMemberId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the service territory member being tracked. The history is displayed on the detail page for this record.

SessionPermSetActivation

The SessionPermSetActivation object represents a permission set assignment activated during an individual user session. When a SessionPermSetActivation object is inserted into a permission set, an activation event fires, allowing the permission settings to apply to the user's specific session. This object is available in API versions 37.0 and later.

Supported Calls

`describeCompactLayouts()`, `describeLayout()`, `query()`, `retrieve()`

Fields

Field Name	Details
`AuthSessionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The session ID related to this permission set assignment for its duration.
`Description`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The session details, such as device used and browser.

Field Name	Details
PermissionSetId	**Type** reference **Properties** Filter, Group, Sort **Description** The permission set ID related to this permission set assignment and user for its duration.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** The user ID of the user to whom this permission set assignment applies for its duration.

Usage

Use SessionPermSetActivation to create a permission set available only for a specified session's duration. For example, create permission sets that provide access to specific applications only during authenticated sessions.

In the following Apex example, an identified session is activated after session information is submitted via a button. Successful activation results in a confirmation message displayed to the user.

```
public class SessionPermSetActivationController {
    // id of the session permission set to be activated
    private final String sessionPermSetId = '0PSxx00000004rJ';
    private final String sessionId;

    public SessionPermSetActivationController() {
       Map<String, String> sessionManagement = Auth.SessionManagement.getCurrentSession();

        sessionId = sessionManagement.get('SessionId');
    }

    public PageReference activate() {
        // activate the permission set
        SessionPermSetActivation activation = new SessionPermSetActivation();
        activation.AuthSessionId = sessionId;
        activation.PermissionSetId = sessionPermSetId;
        activation.Description = 'created by SessionPermSetActivationController';

        insert activation;
        return null;
    }
```

```
    public boolean getActivated() {
        Integer alreadyActivated =  [SELECT count()
                                            FROM SessionPermSetActivation
                                            WHERE AuthSessionId = :sessionId
                                           And PermissionSetId = :sessionPermSetId  LIMIT
 1];
        return alreadyActivated > 0;
    }
}


<apex:page controller="SessionPermSetActivationController">
      <apex:outputPanel rendered="{!!Activated}">
          <h3>Activate Session Permission Set</h3>
          <br />
          <apex:form >
                <apex:commandButton action="{!activate}" value="Activate"
id="activateButton"/>
          </apex:form>
      </apex:outputPanel>
      <apex:outputPanel rendered="{!Activated}">
          <h3>Session Permission Set is already active.</h3>
      </apex:outputPanel>
</apex:page>
```

SetupAuditTrail

Represents changes you or other admins made in your org's Setup area for at least the last 180 days. This object is available in API version 15.0 and later.

Note: SetupAuditTrail is not a supported standard controller. Using SetupAuditTrail as a standard controller in a Visualforce page results in an error.

Supported Calls

`query()`, `retrieve()`

Note: Aggregate queries aren't supported on this object. For example, `SELECT count() FROM SetupAuditTrail` works but `SELECT count(Id) FROM SetupAuditTrail` fails.

Fields

Field	Details
`Action`	**Type** string **Properties** Filter, Sort

Field	Details
	Description The category of the change made in Setup. For example, a value of *`PermSetCreate`* indicates that an administrator created a permission set. The `Display` field contains more specific information.
`DelegateUser`	**Type** string **Properties** Filter, Nillable, Sort **Description** The Login-As user who executed the action in Setup. If a Login-As user didn't perform the action, this field is blank. This field is available in API version 35.0 and later.
`Display`	**Type** string **Properties** Nillable, Sort **Description** The full description of changes made in Setup. For example, if the `Action` field has a value of *`PermSetCreate`*, the `Display` field has a value like "Created permission set MAD: with user license Salesforce."
`Section`	**Type** string **Properties** Nillable, Sort **Description** The section in the Setup menu where the action occurred. For example, Manage Users or Company Profile.

Note: You can use SOQL joins to get the information you need more quickly. For example, running `SELECT CreatedBy.Name FROM SetupAuditTrail LIMIT 10` returns the first and last names of the last 10 people to make changes in Setup.

SetupEntityAccess

Represents the enabled setup entity access settings (such as for Apex classes) for the parent PermissionSet. This object is available in API version 25.0 and later.

To grant users access to an entity, associate the appropriate SetupEntityAccess record with a PermissionSet that's assigned to a user.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the entity's parent PermissionSet.
`SetupEntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the entity for which access is enabled, such as an Apex class or Visualforce page.
`SetupEntityType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of setup entity for which access is enabled. Valid values are: • `ApexClass` for Apex classes • `ApexPage` for Visualforce pages • In API version 28.0 and later, `ConnectedApplication` for OAuth connected apps • In API version 31.0 and later, `CustomPermission` for custom permissions • In API version 28.0 and later, `ServiceProvider` for service providers • In API version 28.0 and later, `TabSet` for apps

Usage

Because SetupEntityAccess is a child of the PermissionSet object, the usage is similar to other PermissionSet child objects like FieldPermissions and ObjectPermissions.

For example, the following code returns all permission sets that grant access to any setup entities for which access is enabled:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
```

The following code returns permission sets that grant access only to Apex classes:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE SetupEntityType='ApexClass'
```

The following code returns permission sets that grant access to any setup entities, and are not owned by a profile:

```
SELECT Id, ParentId, Parent.Name, SetupEntityId
FROM SetupEntityAccess
WHERE ParentId
IN (SELECT Id
   FROM PermissionSet
   WHERE isOwnedByProfile = false)
```

You may want to return only those permission sets that have access to a specific setup entity. To do this, query the parent object. For example, this code returns all permission sets that grant access to the `helloWorld` Apex class:

```
SELECT Id, Name,
   (SELECT Id, Parent.Name, Parent.Profile.Name
   FROM SetupEntityAccessItems)
FROM ApexClass
WHERE Name = 'helloWorld'
```

While it's possible to return permission sets that have access to a `ConnectedApplication`, `ServiceProvider`, or `TabSet` by `SetupEntityId`, it's not possible to return permission sets that have access to these `SetupEntityType` fields by any other AppMenuItem attribute, such as `Name` or `Description`. For example, to find out if a user has access to the Recruiting app, you'd run two queries. First, query to get the AppMenuItem ID:

```
SELECT Id, Name, Label
FROM AppMenuItem
WHERE Name = 'Recruiting'
```

Let's say the previous query returned the AppMenuItem ID 02uD0000000GIiMIAW. Using this ID, you can now run a query to find out if a user has access to the Recruiting app:

```
SELECT Id, SetupEntityId, SetupEntityType
FROM SetupEntityAccess
WHERE ParentId
IN
   (SELECT PermissionSetId
   FROM PermissionSetAssignment
```

```
   WHERE AssigneeId = '005D0000001QOzF')
AND (SetupEntityId = '02uD0000000GIiMIAW')
```

SEE ALSO:

- PermissionSet
- FieldPermissions
- ObjectPermissions
- ApexClass
- ApexPage

Shipment

Represents the transport of inventory in field service.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`ActualDeliveryDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product was delivered.
`DeliveredToId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The person or entity the product was delivered to.
`Description`	**Type** textarea

Field Name	Details
	Properties Create, Nillable, Update **Description** Details not recorded in the provided fields
DestinationLocationId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The place the product is to be delivered.
ExpectedDeliveryDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Date the product is expected to be delivered.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the shipment.

Field Name	Details
Provider	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The company or person making the transfer.
ShipFromAddress	**Type** address **Properties** Filter, Nillable **Description** The place the product is coming from.
ShipFromCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the shipment originates.
ShipFromCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the shipment originates.
ShipFromGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the shipment originates. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLatitude	**Type** double

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the shipment originates. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the shipment originates. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipFromPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the shipment originates.
ShipFromState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the shipment originates.
ShipFromStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the shipment originates.

Field Name	Details
ShipToAddress	**Type** address **Properties** Filter, Nillable **Description** The physical address where the shipment is delivered.
ShipToCity	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city of the address where the shipment is delivered.
ShipToCountry	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country of the address where the shipment is delivered.
ShipToGeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address where the shipment is delivered. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToLatitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the shipment is delivered. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.

Field Name	Details
ShipToLongitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the shipment is delivered. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
ShipToName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The shipment recipient.
ShipToPostalCode	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code of the address where the shipment is delivered.
ShipToState	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state of the address where the shipment is delivered.
ShipToStreet	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street of the address where the shipment is delivered.
ShipmentNumber	**Type** string

Field Name	Details
	Properties Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the shipment.
`SourceLocationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The field service location where the shipment originates.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the shipment. The picklist includes the following values, which can be customized: • *`Shipped`*—The product is in transit. • *`Delivered`*—The product is at the source location.
`TrackingNumber`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Tracking number for the shipment.
`TrackingUrl`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** URL of website used for tracking the shipment.

SignupRequest

Represents a request for a new signup. This object is available in API version 27.0 and later.

Note: You are limited to 20 signups per day. To make additional signups, log a case in the Partner Community.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field Name	Details
`AuthCode`	**Type** string **Properties** Create, Filter, Group, Sort **Description** A one-time authorization code that can be exchanged for an OAuth access token and refresh token using standard Salesforce APIs. It's used with `ConnectedAppCallbackUrl` and `ConnectedAppConsumerKey`, when the specified connected app hasn't been configured with an X.509 certificate. The system provides this read-only field once the sign-up request has been processed. This field is available in API version 29.0 and later.
`Company`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The name of the company requesting the trial sign-up.
`ConnectedAppCallbackUrl`	**Type** string **Properties** Create, Filter, Group, Sort **Description** When used with `ConnectedAppConsumerKey`, specifies a connected app that's approved automatically during the sign-up creation. This field is available in API version 28.0 and later.
`ConnectedAppConsumerKey`	**Type** string **Properties** Create, Filter, Group, Sort **Description** When used with `ConnectedAppCallbackUrl`, specifies a connected app that's approved automatically during the sign-up creation. This field is available in API version 28.0 and later.

Field Name	Details
Country	**Type** string **Properties** Create, Filter, Group, Sort **Description** The default value is the country of the requesting org. If you want to override the default, enter the two-character, upper-case ISO-3166 country code (Alpha-2 code). You can find a full list of these codes at several sites, such as: https://www.iso.org/obp/ui/#search. The language of the trial organization is auto-determined based on the value of this field.
CreatedOrgId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15–character organization ID of the trial organization created. The system provides this read-only field once the sign-up request has been processed.
CreatedOrgInstance	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The server instance of the new trial organization, for example, "na8." This field is available in API version 29.0 and later.
Edition	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The Salesforce template that is used to create the trial organization. Possible values are `Partner Group`, `Professional`, `Partner Professional`, `Sales Professional`, `Professional TSO`, `Enterprise`, `Partner Enterprise`, `Service Enterprise`, `Enterprise TSO`, `Developer`, and `Partner Developer`. This field is available in API version 35.0 and later.
ErrorCode	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The error code if the sign-up request isn't successful. The system provides this read-only field for support purposes.
`FirstName`	**Type** string **Properties** Create, Filter, Nillable, Sort **Description** The first name of the admin user for the trial sign-up.
`LastName`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The last name of the admin user for the trial sign-up.
`PreferredLanguage`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The language of the trial organization being created. Specify the language using a language code listed under Fully Supported Languages in Supported Languagesin Salesforce Help. For example, use *zh_CN* for simplified Chinese. The value you select overrides the language set by the locale. If you specify an invalid language, the organization defaults to the default language of the country. Likewise, if you specify a language that isn't supported by the Salesforce edition associated with your trial template, the trial organization defaults to the default language of the country. This field is available in API version 35.0 and later.
`ResolvedTemplateId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Populated during the sign-up request and for internal use by Salesforce. This field is available in API version 35.0 and later.
`ShouldConnectToEnvHub`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort

Field Name	Details
	Description When set to `true`, the trial organization is connected to the Environment Hub. The sign-up must take place in the hub master organization or a spoke organization. This field is available in API version 35.0 and later.
`SignupEmail`	**Type** email **Properties** Create, Filter, Group, Sort **Description** The email address of the admin user for the trial sign-up.
`SignupSource`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** A user-specified description of the trial sign-up, up to 60 characters in length. This field is available in API version 36.0 and later.
`Status`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** The status of the request. Possible values are `New`, `In Progress`, `Error`, or `Success`. The default value is `New`.
`Subdomain`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The subdomain for the new trial organization when it uses a custom My Domain. The maximum length is 33 characters for Developer Edition (DE) and 40 characters for all other editions (because a suffix is appended to all DE organizations).
`SuppressSignupEmails`	**Type** boolean **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description When set to `true`, no sign-up emails are sent when the trial organization is created. This field is used for the Proxy Signup feature, and is available in API version 29.0 and later.
`TemplateId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort **Description** The 15–character ID of the Trialforce template that is the basis for the trial sign-up. Salesforce must approve the template. If you don't specify an edition, a template ID is required.
`TrialDays`	**Type** anyType **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** The duration of the trial sign-up in days. Must be equal to or less than the trial days for the approved Trialforce template. If not provided, it defaults to the trial duration specified for the Trialforce template.
`TrialSourceOrgId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15–character organization ID of the Trialforce Source Organization from which the Trialforce template was created.
`Username`	**Type** string **Properties** Create, Filter, Group, Sort **Description** The username of the admin user for the trial sign-up. It must follow the address convention specified in RFC822: www.w3.org/Protocols/rfc822/#z10

Usage

The Java class uses the REST API to create a SignupRequest object. It authenticates to the Trialforce Management Organization and then posts a request to the SignupRequest object.

Here are the variables to specify in this example.

- SERVER — The name of the host server for the Trialforce Management Organization (TMO), for example, "`yourInstance`.salesforce.com."
- USERNAME — The admin username for the TMO.
- PASSWORD — The concatenation of the admin password and the security token for the TMO. To get an email with the security token, from your personal settings in Salesforce select **Reset My Security Token** and click **Reset Security Token**.
- CLIENT_ID — From Setup in Salesforce, enter `Apps` in the `Quick Find` box, select **Apps**, and click **New** under Connected Apps. Enter values for the required fields (the Callback URL is required but can initially be set to any valid URL as it's not used), grant full access for the OAuth scopes in the "Selected OAuth Scopes" selector, and click **Save**. Then copy the value of "Consumer Key" and use it for this variable.
- CLIENT_SECRET — On the same page, click **Click to reveal**. Then copy the value of "Consumer Secret" and use it for this variable.

```
public class IsvSignupDriver {
    private static final String SERVER = server_name:port;
    private static final String USERNAME = tmo_username;
    private static final String PASSWORD = tmo_passwordsecurity_token;
    private static final String CLIENT_ID = consumer_key;
    private static final String CLIENT_SECRET = consumer_secret;

    private static SignupRequestInfo signupRequest = null;

    public static String createSignupRequest (SignupRequestInfo sr)
      throws JSONException, IOException {
       JSONObject createResponse = null;
       signupRequest = sr;
       JSONObject loginResponse = login(SERVER, USERNAME, PASSWORD);
       String instanceUrl = loginResponse.getString("instance_url");
       String accessToken = loginResponse.getString("access_token");
       createResponse = create(instanceUrl, accessToken);
       System.out.println("Created SignupRequest object: " + createResponse + "\n");
       return createResponse.toString();
    }

    /* Authenticates to the TMO using the required credentials */

    private static JSONObject login(String server, String username, String password)
      throws ClientProtocolException, IOException, JSONException {
        String authEndPoint = server + "/services/oauth2/token";
        HttpClient httpclient = new DefaultHttpClient();
        try {
            HttpPost post = new HttpPost(authEndPoint);

            List<NameValuePair> params = new ArrayList<NameValuePair>();
            params.add(new BasicNameValuePair("grant_type", "password"));
            params.add(new BasicNameValuePair("client_id", CLIENT_ID));
            params.add(new BasicNameValuePair("client_secret", CLIENT_SECRET));
            params.add(new BasicNameValuePair("username", username));
            params.add(new BasicNameValuePair("password", password));
            post.setEntity(new UrlEncodedFormEntity(params, Consts.UTF_8));

            BasicResponseHandler handler = new BasicResponseHandler();
            String response = httpclient.execute(post, handler);
            return new JSONObject(response);
```

```
        } finally {
            httpclient.getConnectionManager().shutdown();
        }
    }
    /* Posts a request to the SignupRequest object */

    private static JSONObject create(String instanceUrl, String accessToken)
      throws ClientProtocolException, IOException, JSONException {
        HttpClient httpClient = new DefaultHttpClient();
        try {
            HttpPost post = new HttpPost(instanceUrl +
              "/services/data/v27.0/sobjects/SignupRequest/");
                post.setHeader("Authorization", "Bearer " + accessToken);
                post.setHeader("Content-Type", "application/json");

                JSONObject requestBody = new JSONObject();
                requestBody.put("TemplateId", signupRequest.getTemplateID());
                requestBody.put("SignupEmail", signupRequest.getEmail());
                requestBody.put("username", signupRequest.getUsername());
                requestBody.put("Country", "US");
                requestBody.put("Company", signupRequest.getCompanyName());
                requestBody.put("lastName", signupRequest.getLastName());

                StringEntity entity = new StringEntity(requestBody.toString());
                post.setEntity(entity);
                BasicResponseHandler handler = new BasicResponseHandler();
                String response = httpClient.execute(post, handler);
                return new JSONObject(response);
        } finally {
            httpClient.getConnectionManager().shutdown();
        }
    }
}
```

Error Codes

If the sign-up fails, the system generates an error code that can help you identify the cause. This table shows the most important error codes.

Error Code	Description
C-1007	Duplicate username.
C-1015	Error while establishing the new org's My Domain (subdomain) settings. Contact Salesforce support for assistance.
C-1016	Error while configuring the OAuth connected app for Proxy Signup. Verify that your connected app has a valid consumer key, callback URL, and unexpired certificate (if applicable).
C-1018	Invalid subdomain value provided during signup.
C-1019	Subdomain in use. Choose a new subdomain value.
C-1020	Template not found. Either the template doesn't exist (or it was deleted).

Error Code	Description
`C-1033`	Template is the wrong version.
`C-9999`	Generic "fatal error." Contact Salesforce support for assistance.
`S-1006`	Invalid email address (not in a proper email address format).
`S-1014`	Invalid or missing parameters during signup process. Possible solutions include: • Be sure to indicate a valid Callback URL. • If indicated, be sure to provide both a ConsumerKey and Callback URL. For scratch orgs, be sure that you indicate only supported features in scratch org definition file.
`S-1017`	Namespace isn't registered with a release org associated with the Dev Hub.
`S-1018`	Invalid My Domain (subdomain) name. Select a name that doesn't: • Contain double hyphens • End in a hyphen • Include restricted words • Exceed 40 characters (33 for Developer Edition)
`S-1019`	My Domain (subdomain) already in use.
`S-1026`	Invalid namespace. Namespaces must begin with a letter, must not contain consecutive underscores, cannot be a restricted or reserved namespace, and must be 15 characters or fewer.
`S-2006`	Invalid country.
`T-0001`	Template ID not valid (not in the format 0TTxxxxxxxxxxxx).
`T-0002`	Template not found. Either the template doesn't exist (or it was deleted).
`T-0003`	Template not approved for use by Salesforce.

Site

Represents a public website that is integrated with an org. This object is available in API version 16.0 and later.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Description
AdminId	**Type** reference **Properties** Filter, Group, Sort **Description** The site administrator designated as the contact for the site. This user receives site-related communications from site visitors and from Salesforce.
AnalyticsTrackingCode	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The tracking code associated with your site. This code can be used by services like Google Analytics to track page request data for your site.
ClickjackProtectionLevel	**Type** picklist **Properties** Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Sets the clickjack protection level. The options are: • `AllowAllFraming`—Allow framing by any page (no protection) • `SameOriginOnly`—Allow framing by the same origin only (recommended) • `NoFraming`—Don't allow framing by any page (most protection) This field is available in API version 30.0 and later.
DailyBandwidthLimit	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The rolling 24-hour daily bandwidth limit for the sites in your organization.
DailyBandwidthUsed	**Type** double **Properties** Filter, Group, Nillable, Sort

Field	Description
	Description The current rolling 24-hour daily bandwidth usage for the sites in your organization.
`DailyRequestTimeLimit`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The rolling 24-hour daily service request time limit for the sites in your organization. Service request time is calculated as the total server time in minutes required to generate pages for the site.
`DailyRequestTimeUsed`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The current rolling 24-hour daily service request time for the sites in your organization.
`Description`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** An optional description of the site.
`GuestUserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The site or Salesforce Communities specific user that anonymous, unauthenticated users run as when interacting with the site.
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the site as it appears in the user interface.

Field	Description
MonthlyPageViewsEntitlement	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of page views allowed for the current calendar month for the sites in your organization.
Name	**Type** string **Properties** Filter, Group, Sort **Description** The name used when referencing the site in the API.
OptionsAllowGuestSupportApi	**Type** boolean **Properties** Filter **Description** The option to enable unauthenticated users to access the Support API.
OptionsAllowHomePage	**Type** boolean **Properties** Filter **Description** The option to enable the standard page associated with the Home tab (`/home/home.jsp`).
OptionsAllowStandardAnswersPages	**Type** boolean **Properties** Filter **Description** The option to enable standard pages associated with an answers community. If you want to use default Answers pages (such as AnswersHome), enable these pages.
OptionsAllowStandardIdeasPages	**Type** boolean

Field	Description
	Properties Filter **Description** The option to enable standard pages associated with an Ideas community. If you want to use default Ideas pages (such as IdeasHome), enable these pages.
`OptionsAllowStandardLookups`	**Type** boolean **Properties** Filter **Description** The option to enable the standard lookup pages. These are the popup windows associated with lookup fields on Visualforce pages.
`OptionsAllowStandardPortalPages`	**Type** boolean **Properties** Filter **Description** The option to enable authenticated users to access the standard Salesforce pages.
`OptionsAllowStandardSearch`	**Type** boolean **Properties** Filter **Description** The option to enable the standard search pages. To allow public users to perform standard searches, enable these pages.
`OptionsBrowserXssProtection`	**Type** boolean **Properties** Filter **Description** The option to enable the browser's cross-site scripting protection.
`OptionsContentSniffingProtection`	**Type** boolean **Properties** Filter **Description** The option to enable content-sniffing protection.

Field	Description
OptionsCspUpgradeInsecureRequests	**Type** boolean **Properties** Filter **Description** The option to upgrade all requests to HTTPS (Content Security Policy : Upgrade Insecure Requests).
OptionsEnableFeeds	**Type** boolean **Properties** Filter **Description** The option that displays the Syndication Feeds related list, where you can create and manage syndication feeds for users on your public sites. This field is visible only if you have the feature enabled for your organization.
OptionsReferrerPolicyOriginWhenCrossOrigin	**Type** boolean **Properties** Filter **Description** The option to enable referrer policy (origin-when-cross-origin).
OptionsRequireHttps	**Type** boolean **Properties** Filter **Description** When true, the site requires secure connections. When false, the site operates normally via insecure connections instead of redirecting to a secure connection.
SiteType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Identifies whether the site is a Visualforce (Salesforce Sites) or a Site.com site. SiteType is available in API version 21.0 and later. In API version 26.0 and later, if Salesforce communities is enabled for your organization, the site could also be a Network Visualforce or Network Site.com site.

Field	Description
Status	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status for the site. For example, `Active` or `In Maintenance`.
Subdomain	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce domain that you registered for your site. For example, if your domain is `mycompany.force.com`, then `mycompany` is the subdomain.
TopLevelDomain	**Type** url **Properties** Filter, Nillable **Description** The optional branded custom Web address that you registered with a third-party domain name registrar. The custom Web address acts as an alias to your Salesforce address. Beginning with API version 21.0, `TopLevelDomain` is no longer available. Instead, use the Domain and DomainSite objects.
UrlPathPrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique Salesforce URL that the public uses to access this site.

Usage

Use this read-only object to query or retrieve information on your Salesforce site.

SiteDomain

SiteDomain is a read-only object, and a one-to-many replacement for the Site.TopLevelDomain field. This object is available in API version 21.0, and has been deprecated as of API version 26.0. In API version 26.0 and later, use the Domain and DomainSite objects instead.

To access this object, Salesforce Sites, Sites, or Site.com must be enabled for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Description
`Domain`	**Type** url **Properties** Filter, Sort **Description** The branded custom Web address within the global namespace identified by this domain's type. In the Domain Name System (DNS) global namespace, this field is the custom Web address that you registered with a third-party domain name registrar. The custom Web address can be used to access the site of this domain.
`SiteId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Site.
`DomainType`	**Type** picklist **Properties** Filter, Group, Sort, Nillable **Description** The global namespace that this custom Web address belongs to. This value is set to DNS for custom Web addresses in the global DNS. This field is available in version 24.0 of the API.

Usage

Use this read-only object to query the custom Web addresses that are associated with each website in your organization.

SiteHistory

Represents the history of changes to the values in the fields of a site. This object is generally available in API version 18.0 and later.

To access this object, Salesforce Sites must be enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Customer Portal users can't access this object.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The last value of the field before it was changed.

Field	Details
SiteId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the associated Site.

Skill

Represents a category or group that Life Agent users or field service resources can be assigned to. This object is available in API version 24.0 and later.

Note: For information about Work.com skills on a user's profile, see the ProfileSkill topic.

Supported Calls

create(), describeSObjects(), query(), retrieve(), search(), update(), upsert()

Fields

Field Name	Details
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the skill.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.

Field Name	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the skill.
`LastViewedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed the skill.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update, idLookup **Description** The name of the skill.

Usage

Live Agent

Use this object to assign Life Agent users to groups based on their abilities. The skills associated with a LiveChatButton determine which agents receive chat requests that come in through that button.

Field Service Lightning

Use this object to track certifications and areas of expertise in your workforce. After you create a skill, you can:

- Assign it to a service resource via the Skills related list on the resource's detail page. When you assign a skill to a service resource, you can specify their skill level and the duration of the skill.
- Add it as a required skill via the Skill Requirements related list on any work type, work order, or work order line item. When you add a required skill to a work record, you can specify the skill level.

SkillProfile

Represents a join between Skill and Profile. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the profile.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the skill.

Usage

Use this object to assign specific skills to specific profiles.

SkillRequirement

Represents a skill that is required to complete a particular task. Skill requirements can be added to work types, work orders, and work order line items in Field Service. This object is available in API version 38.0 and later. You also can add skill requirements to work items in Omni-Channel skills-based routing using API version 42.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
RelatedRecordId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The record that the skill is required for. The related record can be a work order, work order line item, work type, or pending service routing record.
SkillId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The skill that is required.
SkillLevel	**Type** double **Properties** Create, Defaulted on create, Filter, Nillable, Sort, Update **Description** The level of the skill required. Skill levels can range from zero to 99.99. Depending on your business needs, you may want the skill level to reflect years of experience, certification levels, or license classes.

Field Name	Details
SkillNumber	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number identifying the skill requirement.

Usage

Skill requirements help dispatchers assign work orders to service resources with the proper expertise. You can still assign a work order, work order line item, or related service appointment to a service resource that does *not* possess the specified skills, so skill requirements serve more as a suggestion than a rule.

Note: If you're using the Field Service Lightning managed package, use matching rules to ensure that appointments are only assigned to service resources who possess the skills listed on the parent work order.

If many of your work orders require the same skills, add skill requirements to work types to save time and keep your processes consistent. When you add a skill requirement to a work type, work orders and work order line items that use that type automatically inherit the skill requirement. For example, if all annual maintenance visits for your Classic Refrigerator product require a Refrigerator Maintenance skill level of at least 50, add that skill requirement to the Annual Maintenance Visit work type. When you create a work order for a customer's annual fridge maintenance, applying that work type adds the skill requirement as well.

SkillRequirementFeed

Represents a single feed item on a skill requirement record detail page. This object is available in API version 38.0 and later.

A skill requirement feed shows changes to tracked fields on a skill requirement record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to skill requirements in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.

Field Name	Details
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the skill requirement record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

SkillRequirementHistory

Represents the history of changes made to tracked fields on a skill requirement. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`SkillRequirementId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the skill requirement being tracked. The history is displayed on the detail page for this record.

SkillUser

Represents a join between Skill and User. This object is available in API version 24.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the skill.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user.

Usage

Use this object to assign specific skills to specific users.

SlaProcess

Represents an entitlement process associated with an Entitlement. This object is available in API version 19.0 and later.

An entitlement process is a timeline that includes all the steps (MilestoneType records) that your support team must complete to resolve cases. Each process includes the logic necessary to determine how to enforce the correct service level for your customers.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`, `describeLayout()`

Special Access Rules

Customer Portal users can't access this object.

Important: All users, even those without the "View Setup and Configuration" user permission, can view entitlement processes via the API.

Fields

Field	Details
`BusinessHoursId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Required. ID of the BusinessHours associated with the entitlement. Must be a valid business hours ID.
`Description`	**Type** textarea **Properties** Filter, Nillable **Description** A description of the entitlement process.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the entitlement process is active (`true`) or not (`false`).
`IsVersionDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the entitlement process is the default version (`true`) or not (`false`).

Field	Details
	This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the SlaProcess was last viewed.
Name	**Type** string **Properties** Filter, idLookup **Description** The name of the entitlement process.
NameNorm	**Type** string **Properties** Filter, Group, Sort **Description** The read-only value for the unique name of the entitlement process or the entitlement process version. If entitlement versioning is enabled, this value is automatically generated for each version of an entitlement process in this form: *process name*+_v + *x*, where *x* is the version number (for example, "gold_support_v2"). If entitlement versioning isn't enabled, this value is the same as Name. This field is available in API version 28.0 and later.
SObjectType	**Type** picklist **Properties** Restricted picklist, Filter, Group, Sort **Description** The type of records that the entitlement process can run on. Its values are: • *Case* • *Work Order* An entitlement process runs only on records that match its type. For example, a Case entitlement process that's applied to an entitlement runs only on cases associated with the entitlement, not on work orders. As a best practice, therefore, manage customers' work orders and cases on separate entitlements.

Field	Details
	The field label in the user interface is Entitlement Process Type.
`StartDateField`	**Type** picklist **Properties** Filter, Restricted picklist **Description** The criteria for cases to enter the entitlement process. Cases can enter the process based on: • The creation date on a case • A custom date/time field on a case
`VersionMaster`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Identifies the sequence of versions to which this entitlement process belongs. This field’s contents can be any value as long as it is identical among all versions of the entitlement process. This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
`VersionNotes`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The description of the entitlement process version. This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.
`VersionNumber`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The version number of the entitlement process. Must be 1 or greater. This field is available in API version 28.0 and later in organizations that have entitlement versioning enabled.

Usage

Use this object to query entitlement processes on entitlements.

SEE ALSO:

Entitlement

MilestoneType

CaseMilestone

Solution

Represents a detailed description of a customer issue and the resolution of that issue.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`IsHtml`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Solution is an HTML solution (`true`) or not (`false`).
`IsOutOfDate`	**Type** boolean **Properties** Defaulted on create, Filter

Field	Details
	Description Read-only field that indicates whether a solution master has been updated since the translated version was created (`true`) or not (`false`). Note that this field does not appear in the page layout of master solutions.
`IsPublished`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Solution has been published (`true`) or not (`false`). A solution's published state does not affect how it can be used, or whether you can query, update, or delete it. Label is **Public**. Note: Prior to Spring '14, the label was **Visible in Self-Service Portal**.
`IsPublishedInPublicKb`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the Solution has been published as a Public Solution (`true`) or not (`false`). Label is **Visible in Public Knowledge Base**. This field only applies to solutions, not articles in the public knowledge base.
`IsReviewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the Solution has been reviewed (`true`) or not (`false`). This flag can only be set indirectly via the `Status` picklist. Each predefined `Status` value implies an `IsReviewed` value. Label is **Reviewed**.
`LastReferencedDate`	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.

Field	Details
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who owns the Solution.
ParentId	**Type** reference **Properties** Create, Defaulted on create, Filter, Update **Description** ID of the master solution, if this is the translation of a master solution.
RecordTypeId	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** ID of the RecordType to which the Solution is associated.
SolutionLanguage	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** The language that the solution is written in, such as French or Chinese (Traditional).
SolutionName	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Required. If a client application creates a new Solution and a value for this field is unspecified, a hyphen (-), the default value for this field, is used. Limit: 255 characters. Label is **Title**.
`SolutionNote`	**Type** textarea **Properties** Create, Nillable, Update **Description** The details of the Solution record. Limit: 32,000 characters. Label is **Solution Details**. Note: If you have HTML Solutions enabled, any HTML tags used in this field are verified before the object is created or updated. If invalid HTML is entered, an error is thrown. Any JavaScript used in this field is removed before the object is created or updated.
`SolutionNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An identifying number that is assigned automatically when a solution is created. It can't be set directly, and it can't be modified.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. The status of the solution. Directly controls the `IsReviewed` value. To obtain the status values in the picklist, a client application can query the SolutionStatus.
`TimesUsed`	**Type** int **Properties** Filter, Group, Sort **Description** Number of times this solution has been used. Label is **Num Related Case**.

Usage

Use this object to manage your organization's solutions. Client applications can create, update, delete, and query Attachment records associated with a solution.

SEE ALSO:

CategoryData
CategoryNode

SolutionFeed

Represents a single feed item in the feed displayed on the detail page for a solution record. This object is available in API version 18.0 and later.

A solution feed shows recent changes to a solution record for any fields that are tracked in feeds, and comments and posts about the record. It is a useful way to stay up-to-date with changes to solutions.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Solution object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the SolutionFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.

Field Name	Details
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
ConnectionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only.

Field Name	Details
	The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if `Type` is `ContentPost`. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`FeedPostId`	**Type** reference **Properties** Filter. Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. Use FeedItem instead. The ID of the associated FeedPost. A FeedPost represents the following types of changes in a SolutionFeed: status updates, changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description The ID of the user who added this object to the feed. For example, if a client application migrates multiple posts and comments from another application into the feed, `InsertedById` is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** This field is a standard system field.

Field Name	Details
	When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on the feed item, then `LastModifiedDate` becomes the `CreatedDate` for the FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of the `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.

Field Name	Details
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the solution record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion article associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a SolutionFeed object of `Type` `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the SolutionFeed. When the `Type` is `LinkPost`, the `LinkUrl` is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of SolutionFeed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence.

Field Name	Details
	• AdvancedTextPost—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • AnnouncementPost—Not used. • ApprovalPost—generated when a user submits an approval. • BasicTemplateFeedItem—Not used. • CanvasPost—a post made by a canvas app posted on a feed. • CollaborationGroupCreated—generated when a user creates a public group. • CollaborationGroupUnarchived—Not used. • ContentPost—a post with an attached file. • CreatedRecordEvent—generated when a user creates a record from the publisher. • DashboardComponentAlert—generated when a dashboard metric or gauge exceeds a user-defined threshold. • DashboardComponentSnapshot—created when a user posts a dashboard snapshot on a feed. • LinkPost—a post with an attached URL. • PollPost—a poll posted on a feed. • ProfileSkillPost—generated when a skill is added to a user's Chatter profile. • QuestionPost—generated when a user posts a question. • ReplyPost—generated when Chatter Answers posts a reply. • RypplePost—generated when a user creates a Thanks badge in Work.com. • TextPost—a direct text entry on a feed. • TrackedChange—a change or group of changes to a tracked field. • UserStatus—automatically generated when a user adds a post. Deprecated. The following values appear in the Type picklist for all feed objects but apply only to CaseFeed: • AttachArticleEvent—generated event when a user attaches an article to a case. • CallLogPost—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • CaseCommentPost—generated event when a user adds a case comment for a case object. • ChangeStatusPost—generated event when a user changes the status of a case. • ChatTranscriptPost—generated event when Live Agent transcript is saved to a case.

Field Name	Details
	• `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

Usage

Use this object to track changes for a solution record.

SEE ALSO:

Solution
EntitySubscription
NewsFeed
UserProfileFeed

SolutionHistory

Represents the history of changes to the values in the fields of a solution.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed. Label is **Custom Field Definition ID**.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed. Limited to 255 characters.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed. Limited to 255 characters.
`SolutionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Solution. Label is **Solution ID**.

Usage

Use this read-only object to identify changes to a solution.

This object respects field-level security on the parent object.

SEE ALSO:

SolutionStatus

SolutionStatus

Represents the status of a Solution, such as Draft, Reviewed, and so on.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, NillableSort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default solution status value (`true`) or not (`false`) in the picklist. Only one value can be the default value.
`IsReviewed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this solution status value represents a reviewed Solution (`true`) or not (`false`). Multiple solution status values can represent a reviewed Solution.

Field	Details
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this solution status value. This display value is the internal label that does not get translated.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the solution status picklist. These numbers are not guaranteed to be sequential, as some previous solution status values might have been deleted.

Usage

This object represents a value in the solution status picklist. The solution status picklist provides additional information about the status of a Solution, such as whether a given status value represents a reviewed or unreviewed solution. Your client application can query this object to retrieve the set of values in the solution status picklist, and then use that information while processing Solution objects to determine more information about a given solution. For example, the application could test whether a given case has been reviewed or not based on its `Status` value and the value of the `IsReviewed` property in the associated SolutionStatus record.

SEE ALSO:

Solution

SolutionTag

Associates a word or short phrase with a Solution.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter **Description** ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

SolutionTag stores the relationship between its parent TagDefinition and the Solution being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

SOSDeployment

Represents the general settings for deploying SOS video call capability in a native mobile application. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the deployment.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description The name of the deployment.
`OptionsIsBackwardFacingCameraEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether customers can use the backwards-facing camera on their mobile devices to talk to SOS agents.
`OptionsIsEnabled`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether the deployment is enabled for customers to request new SOS video calls.
`OptionsIsVoiceOnlyMode`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether video functionality is disabled for customers, making it so customers can only talk to SOS agents using only audio.
`QueueId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the queue that's associated with the SOS deployment.

Usage

Use this object to query and manage SOS deployments.

SOSSession

This object is automatically created for each SOS session and stores information about the session. This object is available in API versions 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AppVersion`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The version of the customer's mobile application in which SOS is implemented.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the case that's associated with the SOS session.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the contact that's associated with the SOS session.
`DeploymentId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the SOS deployment that the SOS session originated from.
`EndTime`	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The time that the SOS session ended.
`IpAddress`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** To protect the customer's privacy, this field is now blank.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last referenced by a user.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the session record was last viewed.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** The name of the session.
`OpentokSession`	**Type** encryptedstring **Properties** Create, Nillable, Update **Description** The ID of the OpenTok session that's associated with the SOS video call.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the session record's owner.
SessionDuration	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time that the SOS session lasted.
SessionRecordingUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL where the SOS session recording is stored.
SosVersion	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The version of SOS that was used in your organization's mobile application when this session occurred.
StartTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time that the SOS session began.
SystemInfo	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Information about the customer's mobile device from which the SOS call originated, such as the device's operating system.

Field Name	Details
WaitDuration	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The amount of time the customer waited before an agent accepted the SOS session and the call began.

Usage

Use this object to query and manage SOS session records.

SOSSessionActivity

Captures information about specific events that occur during an SOS video call, such as when an SOS call begins or ends. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
ActivityTime	**Type** dateTime **Properties** Create, Filter, Sort **Description** The time at which the activity occurred.
Name	**Type** string **Properties** Autonumber, Defaulted on create, idLookup, Filter, Sort **Description** The name of the activity.
SessionId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the SOS session that's associated with the event.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The kind of activity that occurred.

Usage

Use this object to query and manage SOS session activities.

SOSSessionHistory

This object is automatically created for each SOS session and stores information about changes made to the session. This object is available in API versions 34.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed in a session record.
`NewValue`	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The original value of the field that was changed.
SOSSessionId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the session record that was changed.

Usage

Use this object to identify changes to SOS session records.

SOSSessionOwnerSharingRule

Represents the rules for sharing an SOS session record with users other than the record owner. This object is available in API version 34.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Determines the level of access users have to session records. Specifies whether or not users can read, edit, or transfer session records. Corresponds to the `Default Access` column in the UI.
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum length is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to `Rule Name` in the UI. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID that represents the source group. Session records that are owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update

Field Name	Details
	Description Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to Label in the UI.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID that represents the User or Group that you are granting access to.

Usage

Use this object to manage the sharing rules for SOS session records.

SEE ALSO:

Metadata API Developer Guide: SharingRules

SOSSessionShare

Represents a sharing entry on an SOS session. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the SOSSession. The possible values are: • `Read`

Field Name	Details
	• `Edit` • `All` (This value is not valid for `create()` or `update()` calls.) This field must be set to an access level that is higher than the organization's default access level for live chat transcripts.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values can include: • `Manual`—The user or group has access because a user with "All" access manually shared the SOSSession with them. • `Owner`—The user is the owner of the SOSSession or is in a role above the SOSSession owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the SOSSession.

Usage

This object lets you determine which users and groups can view and edit SOSSession records that are owned by other users.

If you attempt to create a new record that matches an existing record, the `create()` call updates any modified fields and returns the existing record.

Stamp

Represents a User Specialty. This object is available in API version 39.0 and later.

Create User Specialty labels. Specialties can be any term you want, up to 50 characters, including spaces and underscores.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Description
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Use this field to describe what the user specialty means and how it applies to a user. You have a 255 character maximum including spaces and underscores.
MasterLabel	**Type** string **Properties** Filter, Group, Sort **Description** The User Specialty label that appears under the user's profile picture. You can create any label you want as long as it's within the 50 character maximum, including spaces and underscores.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** The id of the org or network.

StampAssignment

Represents assignment of a User Specialty to a user. This object is available in API version 39.0 and later.

Assign a User Specialty to users. This label appears beneath their profile photo.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
StampId	**Type** reference **Properties** Filter, Group, Sort **Description** The unique id generated when creating a user specialty.
SubjectId	**Type** reference **Properties** Filter, Group, Sort **Description** The id for the user getting the User Specialty label.

StaticResource

Represents a static resource that can be used in Visualforce markup.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field	Details
`Body`	**Type** base64 **Properties** Create, Nillable, Update **Description** Required. Encoded file data.

Field	Details
`BodyLength`	**Type** int **Properties** Filter, Group, Sort **Description** Size of the file (in bytes).
`CacheControl`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The sharing policy for the static resource when cached. The cache control can have one of the following values: • *`Private`* specifies that the static resource data cached on the Salesforce server shouldn't be shared with other users. The static resource is only stored in cache for the current user's session. • *`Public`* specifies that the static resource data cached on the Salesforce server be shared with other users in your organization for faster load times.
`ContentType`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Type of content. Label is **Mime Type**. Limit: 120 characters.
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Text description of the static resource. Limit: 255 characters.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of the static resource.

Field	Details
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.

Usage

Use static resources to upload content that you can reference in Visualforce markup, including archives (such as .zip and .jar files), images, stylesheets, JavaScript, and other files. Using a static resource is preferable to uploading a file to the Documents tab because:

- You can package a collection of related files into a directory hierarchy and upload that hierarchy as a .zip or .jar archive.
- You can reference a static resource in page markup by name using the `$Resource` global variable instead of hard-coding document IDs.

Encoded Data

The API sends and receives the binary file data encoded as a base64 data type. Prior to creating a record, clients must encode the binary file data as base64. Upon receiving an API response, clients must decode the base64 data to binary (this conversion is usually handled for you by the SOAP client).

Maximum Static Resource Size

You can create or update static resources to a maximum size of 5 MB. An organization can have up to 250 MB of static resources, total.

SEE ALSO:

- ApexComponent
- ApexPage
- *Developer Guide*: Visualforce Developer Guide

StreamingChannel

Represents a channel that is the basis for notifying listeners of generic Streaming API events. Available from API version 29.0 or later.

Supported Calls

REST: DELETE, GET, PATCH, POST (query requests are specified in the URI)

SOAP: `create()`, `delete()`, `describe()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`

Special Access Rules

- This object is available only if Streaming API is enabled for your organization.
- Only users with "Create" permission can create this record.
- You can create a permission set and grant users read and create access to all streaming channels in the org. This access isn't for a specific channel, like with user sharing.
- You can apply user sharing to StreamingChannel. You can restrict access to receiving or sending events on a channel by sharing channels with specific users or groups. Channels shared with public read-only or read-write access send events only to clients subscribed to the channel that also are using a user session associated with the set of shared users or groups. Only users with read-write access to a shared channel can generate events on the channel, or modify the actual StreamingChannel record.

Dynamic Streaming Channel

Generic Streaming also supports dynamic streaming channel creation, which creates a StreamingChannel when a client first subscribes to the channel. To enable dynamic streaming channels in your org, from Setup, enter *`User Interface`* in the `Quick Find` box, then select **User Interface** and enable **Enable Dynamic Streaming Channel Creation**.

Fields

Field	Field Type	Description
`Description`	string	Description of the StreamingChannel. Limit: 255 characters. **Field Properties:** Create, Filter, Group, Nillable, Sort, Update **Label:** Description

Field	Field Type	Description
ID	ID	System field: Globally unique string that identifies a StreamingChannel record. **Field Properties:** Default on create, Filter, Group, idLookup, Sort
IsDeleted	boolean	System field: Indicates whether the record has been moved to the Recycle Bin (true) or not (false). **Field Properties:** Default on create, Filter, Group, Sort
IsDynamic	boolean	true if the channel gets dynamically created on subscribe if necessary, false otherwise. **Field Properties:** Default on create, Filter, Group, Sort
LastReferencedDate	date	The timestamp for when the current user last viewed a record related to this record. **Field Properties:** Filter, Sort
LastViewedDate	date	The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed. **Field Properties:** Filter, Sort
Name	string	Required. Descriptive name of the StreamingChannel. Limit: 80 characters, alphanumeric and "_", "/" characters only. Must start with "/u/". This value identifies the channel and must be unique. **Field Properties:** Create, Filter, Group, idLookup, Sort, Update **Label:** Streaming Channel Name
OwnerId	reference	The ID of the owner of the StreamingChannel. **Field Properties:** Create, Default on create, Filter, Group, Sort, Update **Label:** Owner Name

Survey

Represents a survey.

Supported Calls

describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search()

Fields

Field Name	Details
ActiveVersionID	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the survey version currently activated.
Description	**Type** string **Properties** Nillable **Description** The description of the survey. This field isn't visible in the UI.
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The survey's unique API name.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to the survey.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed the survey.
LatestVersionId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description The ID of the most recent version of this survey.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the survey that appears in the UI.
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who created the survey.
`TotalVersionsCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of versions of the survey.

SurveyEmailBranding

Represents the configuration settings for invitation emails sent to survey participants for a particular survey.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Create, Update

Field Name	Details
	Description The body text of the invitation email.
DeveloperName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique API name of the email branding configuration.
FooterImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the content asset that appears in the footer of the invitation email.
FromEmailAddress	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address that appears in the “From” field when the invitation is sent to participants.
HeaderImageId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the content asset that appears in the header of the invitation email.
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the emails. Available languages include: • Chinese (Simplified) • Chinese (Traditional) • Danish

Field Name	Details
	• Dutch • English • Finnish • French • German • Italian • Japanese • Korean • Norwegian • Portuguese (Brazilian) • Russian • Spanish • Spanish (Mexican) • Swedish • Thai
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The label for these email configuration settings.
`Subject`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The subject of the invitation email.

SurveyFeed

Represents a single item in the feed displayed on the detail page for the Survey object. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The content of the feed item. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, you comment on a post that already has one published comment, and your comment triggers moderation. Now the post has two comments, but the count shows only one. In a moderated feed, your comment isn't counted until an admin or user with the CanApproveFeedPostAndComment or ModifyAllData permission approves it. This behavior has implications for how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until the end of comments is returned.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text.

Field	Details
	Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available if Communities is enabled for your org.

Field	Details
	`NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the object type to which the FeedItem object is related. For example, set this field to a `UserId` to post to someone's profile feed, or an `AccountId` to post to a specific account.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with the `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create FeedItem types directly from the API.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** Specifies whether this feed item is available to all users or only internal users. This field is available if Communities is enabled for your org. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available only to internal users. `Visibility` has the following exceptions. • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • `Visibility` can be updated on record posts. • The `Update` property is supported only for feed items posted on records.

SurveyInvitation

Represents the invitation sent to a participant to complete the survey.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CommunityId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the community that you want to send the survey to.
`EmailBrandingId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The ID of the survey email branding object that's associated with this invitation.
InvitationLink	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL to the survey that is sent to particpants.
InviteExpiryDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time that the survey invitation expires.
IsDefault	**Type** boolean **Properties** Create, Defaulted on create, Filter , Group, Sort, Update **Description** Determines whether this is the default survey invitation to use when the survey is sent to participants.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this survey invitation.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed this survey invitation.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the survey invitation that appears in the UI.
`OptionsAllowGuestUserResponse`	**Type** boolean **Properties** Create, Filter **Description** Determines whether participants who don't have a Salesforce account can complete the survey.
`OptionsAllowParticipantAccessTheirResponse`	**Type** boolean **Properties** Create, Filter **Description** Determines whether participants can access a copy of their responses after they complete the survey.
`OptionsCollectAnonymousResponse`	**Type** boolean **Properties** Create, Filter **Description** Determines whether participants can complete the survey anonymously.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who created the survey invitation.
`ParticipantId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort **Description** The user ID of the participant if the participant is a Salesforce user or contact.
`SurveyId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the survey that's sent in the invitation.

SurveyInvitationShare

Represents a sharing entry on a SurveyInvitation object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`,`query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the survey invitation. The possible values are: • Read Only • Read/Write • Owner
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the SurveyInvitation object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason that this sharing entry exists. Possible values include: • Owner • Manual Sharing • Sharing Rule • Account Sharing • Associated record owner or sharing • Person Contact • Sales Team • Territory Assignment Rule • Territory Manual • Territory Sharing Rule • Territory assignment for forecasting and reporting
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the SurveyInvitation object. This field can't be updated.

SurveyPage

Represents a page, such as the title page or a question page, in a survey.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort **Description** The unique API name of this SurveyPage object.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The name of the survey page that appears in the UI.
SurveyVersionId	**Type** reference **Properties** Filter, Group, Sort **Description** The version of the survey that the page belongs to.

SurveyQuestion

Represents a question in a survey.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
DeveloperName	**Type** string **Properties** Filter, Group, Sort

Field	Details
	Description The API name of the SurveyQuestion object. The API name must be unique within a particular version of the survey.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A label for this question in a survey that appears in the UI.
`IsDeprecated`	**Type** boolean **Properties** Defaulted on create, Filter , Group, Sort **Description** Indicates whether a question was deleted from the survey.
`QuestionType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of question.
`SurveyPageId`	**Type** reference **Properties** Filter, Group, Sort **Description** Lookup to the SurveyPage object that contains the question.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyVersion object that the question belongs to.

SurveyQuestionChoice

Represents an answer choice that a participant can select for a survey question.

Supported Calls

`describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`DeveloperName`	**Type** string **Properties** Filter, Group, Sort **Description** The unique API name of the SurveyQuestionChoice object.
`IsDeprecated`	**Type** boolean **Properties** Defaulted on create, Filter , Group, Sort **Description** Indicates whether a question choice was deleted from the survey.
`Name`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** A label for the question choice that appears in the UI.
`QuestionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyQuestion object that this choice belongs to.
`SurveyVersionId`	**Type** reference

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The version of the survey that this question choice belongs to.

SurveyQuestionResponse

Represents a participant's answer to a specific question.

Supported Calls

`describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`Datatype`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The data type of the question response. Possible values are: • String • Number • Date • Int • Double
`InvitationId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyInvitation object that was sent to the survey participant.
`QuestionChoiceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description The ID of SurveyQuestionChoice object that the participant chose in response to a question.
`QuestionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyQuestion object that the participant provided an answer for.
`ResponseId`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The ID of the SurveyResponse object that is the parent of this SurveyQuestionResponse object.
`ResponseShortText`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** For a text question type, the text that a participant entered as a response to the question. For other question types, this field stores the value of the QuestionChoice object that the participant selected.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyVersion object that the response belongs to.

SurveyResponse

Represents information about a participant's response to a survey, such as the status of the response, the participant's location, and when the survey was completed.

Supported Calls

`describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`

Fields

Field Name	Details
`CompletionDateTime`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the participant completed the survey.
`InterviewGuid`	**Type** string **Properties** Filter, Group, Nillable **Description** An automatically-generated, unique ID for a saved survey response.
`InvitationId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the SurveyInvitation object that's associated with this response.
`IpAddress`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The IP address of the device the participant used to take the survey.
`Language`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The language that the participant used to complete the survey.

Field Name	Details
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that another Salesforce object last referenced this SurveyResponse object.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that someone last viewed this SurveyResponse object.
Latitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The latitude of the participant's location.
Location	**Type** location **Properties** Nillable **Description** The latitude and longitude coordinates of the participant's location.
Longitude	**Type** double **Properties** Filter, Nillable, Sort **Description** The longitude of the participant's location.
Name	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The name of the participant.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the survey. Possible values include: • NotStarted • Started • Paused • Completed
`SubmitterId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Salesforce user or contact who completed the survey.
`SurveyId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the survey that the participant completed.
`SurveyVersionId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the version of the survey that the participant completed.

SurveyShare

Represents a sharing entry on a Survey object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the survey. The possible values are: • Read Only • Read/Write • Owner
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Survey object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason that this sharing entry exists. Possible values include: • Owner • Manual Sharing • Sharing Rule • Account Sharing • Associated record owner or sharing • Person Contact • Sales Team • Territory Assignment Rule • Territory Manual • Territory Sharing Rule • Territory assignment for forecasting and reporting

Field Name	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the Survey object. This field can't be updated.

SurveyVersion

Represents a version of a survey.

Supported Calls

describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), search()

Fields

Field Name	Details
Description	**Type** textarea **Properties** Nillable **Description** The description of this survey version.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time that the current user last viewed a record related to this survey.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this survey.

Field Name	Details
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** The name of the survey that appears in the UI.
`SurveyId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Survey object associated with this survey version.
`SurveyStatus`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the survey. Possible values include: • Active • Draft • Obsolete • InvalidDraft
`VersionNumber`	**Type** int **Properties** Filter, Group, Sort **Description** The version number of the survey.

TabDefinition

Represents a custom tab. Returns only the tabs that the current user has access to. This object is available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
DurableId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Unique identifier for the tab. Always retrieve this value before using it, because the value isn't guaranteed to stay the same from one release to the next. Simplify queries by using this field instead of making multiple queries.
IsAvailableInAloha	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is available in Salesforce Classic.
IsAvailableInLightning	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is available in Lightning Experience.
IsCustom	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the tab is a custom tab created by admins in the org.
Label	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The localized label corresponding to the `MasterLabel` field in the Tooling API object.

Field Name	Details
`Name`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The developer name of the tab.
`SobjectName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name of the sObject corresponding to the tab.
`Url`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The URL that can be used to launch this tab.

TagDefinition

Defines the attributes of child Tag objects.

Supported Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`

Fields

Field	Detail
`Name`	**Type** string **Properties** Filter, Nillable, Update **Description** Identifies the tag word or phrase.

Field	Detail
`Type`	**Type** picklist **Properties** Filter, Nillable, Restricted picklist **Description** Defines the visibility of a tag. Possible value are: • **Public**: The tag can be viewed and manipulated between all users in an organization. • **Personal**: The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

When you create a tag for a record, an association is created with to a corresponding TagDefinition:

- If the value in the tag's `Name` field is new, a new TagDefinition record is automatically created and becomes the parent of the tag.
- If the value in the tag's `Name` field already exists in a TagDefinition, that TagDefinition automatically becomes the parent of the tag.

Each TagDefinition record has a one-to-many relationship with its child tag records.

The following standard objects represent tags for records:

- AccountTag
- AssetTag
- CampaignTag
- CaseTag
- ContactTag
- ContractTag
- DocumentTag
- EventTag
- LeadTag
- NoteTag
- OpportunityTag
- SolutionTag
- TaskTag

Custom objects may also be tagged. Tags for custom objects are identified by a suffix of two underscores immediately followed by the word `tag`. For example, a custom object named `Meeting` has a corresponding tag named Meeting__tag in that organization's WSDL. Meeting__tag is only valid for `Meeting` objects.

TagDefinition is useful for mass operations on any tag record. For instance, if you want to rename existing tags, you can search for the appropriate TagDefinition object, update it, and the child tag's `Name` values are also changed. The following Java example replaces all `WC` tags with the phrase `West Coast`:

```
public void tagDefinitionSample() {
  String soqlQuery = "SELECT Id, Name FROM TagDefinition " +
      "WHERE Name = 'WC'";
```

```
    QueryResult qResult = null;
    try {
        qResult = connection.query(soqlQuery);
      TagDefinition tagDef = (TagDefinition) qResult.getRecords()[0];
      tagDef.setName("West Coast");
      connection.update(new SObject[]{tagDef});
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

Task

Represents a business activity such as making a phone call or other to-do items. In the user interface, Task and Event records are collectively referred to as activities.

Note: Task fields related to calls are exclusive to Salesforce CRM Call Center. Also, `query()`, `delete()`, and `update()` aren't allowed with tasks related to more than one contact in API versions 23.0 and earlier.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Field Type
`AccountId`	**Type** reference **Properties** Group, Sort, Filter, Nillable **Description** Represents the ID of the related Account. The `AccountId` is determined as follows. If the value of `WhatId` is any of the following objects, then Salesforce uses that object's `AccountId`. • Account • Opportunity • Contract • Custom object that is a child of Account If the value of the `WhatId`field is any other object, and the value of the `WhoId` field is a Contact object, then Salesforce uses that contact's `AccountId`. (If your organization uses Shared Activities, then Salesforce uses the `AccountId` of the primary contact.)

Field	Field Type
	Otherwise, Salesforce sets the value of the `AccountId` field to `null`. For information on IDs, see ID Field Type.
`ActivityDate`	**Type** date **Properties** Group, Sort, Create, Filter, Nillable, Update **Description** Represents the due date of the task. This field has a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant; do not attempt to alter it to accommodate time zone differences. Label is **Due Date**. Note: This field can't be set or updated for a recurring task (`IsRecurrence` is `true`).
`CallDisposition`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters. Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
`CallDurationInSeconds`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Duration of the call in seconds. Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
`CallObject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Name of a call center. Limit is 255 characters.

Field	Field Type
	Not subject to field-level security, available for any user in an organization with Salesforce CRM Call Center.
CallType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of call being answered: Inbound, Internal, or Outbound.
ConnectionReceivedId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that shared this record with your organization. This field is available if you enabled Salesforce to Salesforce.
ConnectionSentId	**Type** reference **Properties** Filter, Nillable **Description** ID of the PartnerNetworkConnection that you shared this record with. This field is available if you enabled Salesforce to Salesforce. This field is supported using API versions earlier than 15.0. In all other API versions, this field's value is null. You can use the new PartnerNetworkRecordConnection object to forward records to connections.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains a text description of the task.
IsArchived	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the event has been archived.

Field	Field Type
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the task has been completed (`true`) or not (`false`). Is only set indirectly via the `Status` picklist. Label is **Closed**.
IsHighPriority	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates a high-priority task. This field is derived from the `Priority` field.
IsRecurrence	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the task is scheduled to repeat itself (`true`) or only occurs once (`false`). This field is read-only on update, but not on create. If this field value is `true`, then `RecurrenceStartDateOnly`, `RecurrenceEndDateOnly`, `RecurrenceType`, and any recurrence fields associated with the given recurrence type must be populated. See Recurring Tasks.
IsReminderSet	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether a popup reminder has been set for the task (`true`) or not (`false`).
IsVisibleInSelfService	**Type** boolean **Properties** Defaulted on create, Filter, Update **Description** Indicates whether a task associated with an object can be viewed in the Customer Portal (`true`) or not (`false`).

Field	Field Type
	If your organization has enabled Communities, tasks marked `IsVisibleInSelfService` are visible to any external user in the community, as long as the user has access to the record the task was created on. This field is available when Customer Portal or partner portal are enabled OR Communities is enabled and you have Customer Portal or partner portal licenses.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the User who owns the record. Label is **Assigned To ID**.
`Priority`	**Type** picklist **Properties** Defaulted on create, Group, Sort, Create, Filter, Update **Description** Required. Indicates the importance or urgency of a task, such as high or low.
`RecurrenceActivityId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Read-only. Not required on create. ID of the main record of the recurring task. Subsequent occurrences have the same value in this field.
`RecurrenceDayOfMonth`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day of the month in which the task repeats.
`RecurrenceDayOfWeekMask`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The day or days of the week on which the task repeats. This field contains a bitmask. The values are as follows:

Field	Field Type
	- Sunday = 1 - Monday = 2 - Tuesday = 4 - Wednesday = 8 - Thursday = 16 - Friday = 32 - Saturday = 64 Multiple days are represented as the sum of their numerical values. For example, Tuesday and Thursday = 4 + 16 = 20.
`RecurrenceEndDateOnly`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last date on which the task repeats. This field has a timestamp that is always set to midnight in the Coordinated Universal Time (UTC) time zone. The timestamp is not relevant; do not attempt to alter it to accommodate time zone differences.
`RecurrenceInstance`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The frequency of the recurring task. For example, “2nd” or “3rd.”
`RecurrenceInterval`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The interval between recurring tasks.
`RecurrenceMonthOfYear`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The month of the year in which the task repeats.

Field	Field Type
RecurrenceRegeneratedType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Represents what triggers a repeating task to repeat. Add this field to a page layout together with the `RecurrenceInterval` field, which determines the number of days between the triggering date (due date or close date) and the due date of the next repeating task in the series. Label is **Repeat This Task**. This field has the following picklist values: • **None**: The task doesn't repeat. • **After due date**: The next repeating task will be due the specified number of days after the current task's due date. • **After the task is closed**: The next repeating task will be due the specified number of days after the current task is closed. • **(Task closed)**: This task, now closed, was opened as part of a repeating series.
RecurrenceStartDateOnly	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date when the recurring task begins. Must be a date and time before `RecurrenceEndDateOnly`.
RecurrenceTimeZoneSidKey	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The time zone associated with the recurring task. For example, "UTC-8:00" for Pacific Standard Time.
RecurrenceType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Indicates how often the task repeats. For example, daily, weekly, or every nth month (where "nth" is defined in `RecurrenceInstance`).

Field	Field Type
ReminderDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** Represents the time when the reminder is scheduled to fire, if `IsReminderSet` is set to `true`. If `IsReminderSet` is set to `false`, then the user may have deselected the reminder checkbox in the Salesforce user interface, or the reminder has already fired at the time indicated by the value.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Required. The status of the task, such as In Progress or Completed. Each predefined `Status` field implies a value for the `IsClosed` flag. To obtain picklist values, query the TaskStatus object. Note: This field can't be updated for recurring tasks (`IsRecurrence` is `true`).
Subject	**Type** combobox **Properties** Create, Filter, Nillable, Sort, Update **Description** The subject line of the task, such as "Call" or "Send Quote." Limit: 255 characters.
TaskSubtype	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Provides standard subtypes to facilitate creating and searching for specific task subtypes. This field isn't updateable. `TaskSubtype` values: • Task • Email • List Email • Call

Field	Field Type
`TaskWhoIds`	**Type** JunctionIdList **Properties** Create, Update **Description** A string array of contact or lead IDs related to this task. This `JunctionIdList` field is linked to the `TaskWhoRelations` child relationship. `TaskWhoIds` is only available when the shared activities setting is enabled. The first contact or lead ID in the list becomes the primary `WhoId` if you don't specify a primary `WhoId`. If you set the `EventWhoIds` field to null, all entries in the list are deleted and the value of `WhoId` is added as the first entry. Warning: Adding a `JunctionIdList` field name to the `fieldsToNull` property deletes all related junction records. This action can't be undone.
`Type`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** The type of task, such as Call or Meeting.
`WhatCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Available to organizations that have Shared Activities enabled. Count of related TaskRelations pertaining to `WhatId`. Count of the `WhatId` must be *1* or less.
`WhatId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The `WhatId` represents nonhuman objects such as accounts, opportunities, campaigns, cases, or custom objects. `WhatId`s are polymorphic. Polymorphic means a `WhatId` is equivalent to the ID of a related object. The label is `Related To ID`.
`WhoCount`	**Type** int **Properties** Filter, Group, Nillable, Sort

Field	Field Type
	Description Available to organizations that have Shared Activities enabled. Count of related TaskRelations pertaining to `WhoId`.
`WhoId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The WhoId represents a human such as a lead or a contact. WhoIds are polymorphic. Polymorphic means a WhoId is equivalent to a contact's ID or a lead's ID. The label is `Name ID`. If Shared Activities is enabled, the value of this field is the ID of the related lead or primary contact. If you add, update, or remove the WhoId field, you might encounter problems with triggers, workflows, and data validation rules that are associated with the record. The label is `Name ID`. Beginning in API version 37.0, if the contact or lead ID in the `WhoId` field is not in the `TaskWhoIds` list, no error occurs and the ID is added to the `TaskWhoIds` as the primary `WhoId`. If `WhoId` is set to null, an arbitrary ID from the existing `TaskWhoIds` list is promoted to the primary position.

Usage

Recurring Tasks

- Recurring tasks are available in API version 16.0 and later.
- After a task is created, it can't be changed from recurring to nonrecurring or vice versa.
- When a user creates a series of recurring tasks, Salesforce creates a main record and subsequent occurrences. For the main record, `IsRecurrence` is set to `true` and other fields that define the recurrence pattern are populated. The ID of the main record of the recurring task is saved in the subsequent occurrences, in the `RecurrenceActivityId` field.
- When you delete a recurring task series through the API, all open and closed task occurrences in the series are removed. However, when you delete a recurring task series through the user interface, only open tasks occurrences (`IsClosed` is `false`) in the series are removed.
- If `IsRecurrence` is `true`, then `RecurrenceStartDateOnly`, `RecurrenceEndDateOnly`, `RecurrenceType`, and any properties associated with the given recurrence type (see the following table) must be populated.
- When you change the `RecurrenceStartDateOnly` field or the recurrence pattern, all open tasks occurrences in the series are deleted and new open task occurrences are created based on the new recurrence pattern. The following fields determine the recurrence pattern: `RecurrenceType`, `RecurrenceTimeZoneSidKey`, `RecurrenceInterval`, `RecurrenceDayOfWeekMask`, `RecurrenceDayOfMonth`, `RecurrenceInstance`, and `RecurrenceMonthOfYear`.
- When you change the value of `RecurrenceEndDateOnly` to an earlier date (for example, from January 20th to January 10th), all open task occurrences in the series with the `ActivityDate` value greater than the new end date value are deleted. Other open and closed task occurrences in the series are not affected.

- When you change the value of `RecurrenceEndDateOnly` to a later date (for example, from January 10th to January 20th), new task occurrences are created up to the new end date. Existing open and closed tasks in the series are not affected.

The following table describes the usage of recurrence fields. Each recurrence type must have all of its properties set. All unused properties must be set to null.

RecurrenceType Value	Properties	Example Pattern
RecursDaily	RecurrenceInterval	Every second day
RecursEveryWeekday	RecurrenceDayOfWeekMask	Every weekday - can't be Saturday or Sunday
RecursMonthly	RecurrenceDayOfMonth RecurrenceInterval	Every second month, on the third day of the month
RecursMonthlyNth	RecurrenceInterval RecurrenceInstance RecurrenceDayOfWeekMask	Every second month, on the last Friday of the month
RecursWeekly	RecurrenceInterval RecurrenceDayOfWeekMask	Every three weeks on Wednesday and Friday
RecursYearly	RecurrenceDayOfMonth RecurrenceMonthOfYear	Every March on the twenty-sixth day of the month
RecursYearlyNth	RecurrenceDayOfWeekMask RecurrenceInstanceRecurrenceMonthOfYear	The first Saturday in every October

JunctionIdList

The `JunctionIdList` field is now implemented in the Event and Task objects. With a single API call, it's easy to create many-to-many relationships between the Event or Task object with contacts, leads, or users.

To create a Task with related Contacts without `JunctionIdList`, you first have to create the task, then use the returned task ID to create the `TaskRelation` records. If the `TaskRelation` save call fails, error handling is your responsibility because the task has already been committed to the database.

```
public void createTasksOld(Contact[] contacts) {
 Task task = new Task();
 task.setSubject("New Task");
 SaveResult[] results = null;
 try {
  results = connection.create(new Task[] {
   task
  });
  if (results[0].isSuccess()) {
   TaskRelation[] relations = new TaskRelation[contacts.size()];
   for (int i = 0; i < contacts.length; i++) {
    relations[i] = new TaskRelation();
    relations[i].setTaskId(results[0].getID());
    relations[i].setRelationId(contacts[i].getID());
   }
   results = connection.create(relations);
  }
 } catch (ConnectionException ce) {
  ce.printStackTrace();
```

```
 }
}
```

To create a task using `JuncionIdList`, IDs are pulled from the related contacts and both the task and the `TaskRelation` records are created in one API call. If the `TaskRelation` fails, the task is rolled back because it's all done in a single API call.

```
public void createTaskNew(Contact[] contacts) {
 String[] contactIds = new String[contacts.size()];
 for (int i = 0; i < contacts.size(); i++) {
  contactIds[i] = contacts[i].getID();
 }
 Task task = new Task();
 task.setSubject("New Task");
 task.setTaskWhoIds(contactIds);
 SaveResult[] results = null;
 try {
  results = connection.create(new Task[] {
   task
  });
 } catch (ConnectionException ce) {
  ce.printStackTrace();
 }
}
```

SEE ALSO:

Object Basics

TaskFeed

Represents a single feed item in the feed on a Task. This object is available in API version 20.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of TaskFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable

Field	Details
	Description Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort

Field	Details
	Description Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>`

Field	Details
	Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url

Field	Details
	Properties Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.

Field	Details
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the task record. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply.

Field	Details
	• `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a task record.

TaskPriority

Represents the importance or urgency of a Task, such as High, Normal, or Low.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, NillableSort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default task priority value (`true`) or not (`false`) in the picklist. Only one value in the picklist can be the default value.
`IsHighPriority`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this task priority value represents a high priority Task (`true`) or not (`false`). Multiple task priority values can represent a high-priority Task.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field	Details
	Description Master label for this task priority value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Nillable, Group, Sort **Description** Number used to sort this value in the task priority picklist. These numbers are not guaranteed to be sequential, as some previous task priority values might have been deleted.

Usage

This object represents a value in the task priority picklist. The task priority picklist provides additional information about the importance of a Task, such as whether a given priority value represents a high priority. Your client application can query on this object to retrieve the set of values in the task priority picklist, and then use that information while processing Task objects to determine more information about a given task. For example, the application could test whether a given Task is high priority based on its `Priority` value and the value of the `IsHighPriority` in the associated TaskPriority object.

SEE ALSO:

Object Basics

TaskRelation

Represents the relationship between a task and a lead, contacts, and other objects related to the task. If Shared Activities is enabled, this object doesn't support triggers, workflow, or data validation rules. This object is available in API version 24.0 and later.

TaskRelation is only available if you've enabled Shared Activities in your organization.

TaskRelation allows the following relationships:

- A task can be related to one lead or up to 50 contacts.
- A task can also be related to one account, asset, campaign, case, contract, opportunity, product, solution, or custom object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `queryAll()`, `retrieve()`

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the Account ID of the relation. For information on IDs, see ID Field Type.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a task has been deleted; label is **Deleted**. When a TaskRelation record is deleted, it isn't moved to the Recycle Bin and can't be undeleted, unless the record was cascade-deleted when the parent object was deleted. Don't use the `IsDeleted` field to detect deleted records in SOQL queries or `queryAll()` calls on directly deleted relation records. Instead, use the call `getDeleted()`.
IsWhat	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the relation is an Account, Opportunity, Campaign, Case, other standard object, or a custom object. Value is `false` if `RelationId` is a contact or lead and `true` otherwise.
RelationId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Indicates the `WhatId` or `WhoId` in the relationship. For more information, see `Task`. For information on IDs, see ID Field Type.
TaskId	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** Represents the ID of the associated Task. For information on IDs, see ID Field Type.

Usage

See contacts associated with a task

```
public void queryWhosOfTaskSample() {
     String soqlQuery = "SELECT Id, Subject, (SELECT RelationId, Relation.Name, IsWhat
 from TaskRelations WHERE isWhat = false) FROM Task WHERE Id = '00T x00000050KEN'";
    QueryResult qResult = null;
    try {
        qResult = connection.query(soqlQuery);
        TaskRelation relation1 =
(TaskRelation)qResult.getRecords()[0].getTaskRelations().getRecords()[0];
    }catch (ConnectionException ce) {
        ce.printStackTrace();
     }
 }
```

SEE ALSO:

Task

TaskWhoRelation

TaskStatus

Represents the status of a Task, such as Not Started, Completed, or Closed.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`ApiName`	**Type** string **Properties** Filter, Group, NillableSort **Description** Uniquely identifies a picklist value so it can be retrieved without using an id or master label.
`IsClosed`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this task status value represents a closed Task (`true`) or not (`false`). Multiple task status values can represent a closed Task.
`IsDefault`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether this is the default task status value (`true`) or not (`false`) in the picklist.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Master label for this task status value. This display value is the internal label that does not get translated. Limit: 255 characters.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Number used to sort this value in the task status picklist. These numbers are not guaranteed to be sequential, as some previous task status values might have been deleted.

Usage

This object represents a value in the task status picklist. The task status picklist provides additional information about the status of a Task, such as whether a given status value represents an open or closed task. Your client application can query this object to retrieve the set of values in the task status picklist, and then use that information while processing Task records to determine more information about a given task. For example, the application could test whether a given task is open or closed based on the Task `Status` value and the value of the `IsClosed` property in the associated TaskStatus record.

SEE ALSO:

Object Basics

TaskTag

Associates a word or short phrase with a Task.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ItemId`	**Type** reference **Properties** Create, Filter **Description** ID of the tagged item.
`Name`	**Type** string **Properties** Create, Filter **Description** Name of the tag. If this value does not already exist, a new TagDefinition is created and becomes the parent of this Tag object. Otherwise, a TagDefinition with the same name becomes the parent of this Tag object. Parent relationships are created automatically.
`TagDefinitionId`	**Type** reference **Properties** Filter

Field Name	Details
	Description ID of the parent TagDefinition object that owns the tag.
`Type`	**Type** picklist **Properties** Create, Filter, Restricted picklist **Description** Defines the visibility of a tag. Valid values: • `Public`—The tag can be viewed and manipulated by all users in an organization. • `Personal`—The tag can be viewed or manipulated only by a user with a matching `OwnerId`.

Usage

TaskTag stores the relationship between its parent TagDefinition and the Task being tagged. Tag objects act as metadata, allowing users to describe and organize their data.

When a tag is deleted, its parent TagDefinition will also be deleted if the name is not being used; otherwise, the parent remains. Deleting a TagDefinition sends it to the Recycle Bin, along with any associated tag entries.

TaskWhoRelation

Represents the relationship between a task and a lead or contacts. This object is available in API version 29.0 and later.

This derived object is a filtered version of the TaskRelation on page 2269 object; that is, IsParent is *`true`* and IsWhat is *`false`*. It doesn't represent relationships to accounts, opportunities, or other objects.

TaskWhoRelation allows a variable number of relationships: one lead or up to 50 contacts. Available only if you've enabled Shared Activities for your organization.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`RelationId`	**Type** reference

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** Indicates the ID of the contacts or lead related to the task.
`TaskId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the task.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the person related to the task is a lead or contact.

Usage

Apex example that queries contacts associated with a task

```
public void queryWhosOfTaskSample() {
    String soqlQuery = "SELECT Id, Subject, (SELECT RelationId, Relation.Name, IsWhat
from TaskWhoRelations) FROM Task WHERE Id = '00Tx0000005OKEN'";
    QueryResult qResult = null;
    try {
        qResult = connection.query(soqlQuery);
        TaskWhoRelation relation1 =
(TaskWhoRelation)qResult.getRecords()[0].getTaskWhoRelations().getRecords()[0];
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

SEE ALSO:

Task

TaskRelation

TenantSecret

This object stores an encrypted organization-specific key fragment that is used with the master secret to produce organization-specific data encryption keys. This object is available in API version 34.0 and later.

You can rotate tenant secrets of the `Data` type once every four hours in a sandbox org or every 24 hours in production orgs. You can rotate tenant secrets of the `SearchIndex` type once every seven days.

Note: This information is about Shield Platform Encryption and not Classic Encryption.

Supported Calls

`create()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the tenant secret.
`KeyDerivationMode`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The key derivation mode applied to customer-supplied key material. Modes are: **PBKDF2** The customer-supplied key material is used by the Shield KMS to create a derived data encryption key. **NONE** The customer-supplied key material is used by the Shield KMS as the final data encryption key to directly encrypt and decrypt data. Available in API version 43.0 and later.
`SecretValue`	**Type** base64 **Properties** Create, Nillable, Update

Field Name	Details
	Description The encrypted 256-bit secret value encoded in base64.
`SecretValueCertificate`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The certificate needed to upload a customer-supplied tenant secret. Each certificate has a unique name.
`SecretValueHash`	**Type** base64 **Properties** Create **Description** The matching tenant secret hash for an uploaded customer-supplied tenant secret.
`Source`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The source of the encryption key material. Values are: **HSM** A Salesforce-generated tenant secret. **UPLOADED** A customer-supplied tenant secret or data encryption key. Available in API version 43.0 and later.
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The status of the tenant secret. Values are: **ACTIVE** Can be used to encrypt and decrypt new or existing data.

Field Name	Details
	ARCHIVED Cannot encrypt new data. Can be used to decrypt data previously encrypted with this key when it was active. **DESTROYED** Cannot encrypt or decrypt data. Data encrypted with this key when it was active can no longer be decrypted. Files and attachments encrypted with this key can no longer be downloaded.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** The type of tenant secret. The `Type` field is available in API version 39.0 and later. The following values appear in the `Type` picklist: • `Data`—data stored in the Salesforce database. Includes data in encrypted fields, files, and attachments but not search index files. Tenant secrets created in API version 34.0 and later default to the `Data` type. • `SearchIndex`—search index files (available in API version 39.0 and later). • `Analytics`—Einstein Analytics data (available in API version 39.0 and later). • `DeterministicData`—data stored in the Salesforce database. Includes data in encrypted fields, files, and attachments, but not search index files (available in API version 39.0 and later). • `EventBus`—Change Data Capture event data (available in API version 43.0 and later). Change Data Capture is part of a pilot.
`Version`	**Type** int **Properties** Filter, Group, idLookup, Sort **Description** The version number of this secret. The version number is unique within your org.

Usage

Use this object to create or update an org-specific tenant secret or customer-supplied key material. For example, you can build an automated tenant secret creation and activation solution similar to the following.

1. Start by creating an Apex class to create the new tenant secret. Specify the value of the tenant secret to encrypt data of a particular type.

```
global class CreateNewSecret implements Schedulable {
   global void execute(SchedulableContext SC) {
      TenantSecret secret = new TenantSecret ();
      secret.description = 'Created new secret from scheduled job';
      secret.type= ‘SearchIndex’;
      insert secret;
   }
}
```

   Note: `Type` is available in API version 39.0 and later. `Type` is optional; all tenant secrets default to the `Data` type.

2. Schedule the Apex class to run at the specified interval.

   This Apex code only needs to be run a single time to schedule the job. This code runs the job every 90 days.

```
CreateNewSecret secret = new CreateNewSecret();
String schedule = '0 0 0 1 JAN,APR,JUL,OCT ?';
String jobID = system.schedule('Automated secret creation and activation', schedule,
secret);
```

3. Validate that the job is scheduled.
4. Validate that tenant secrets are created after the job is run.

You can also upload a customer-supplied tenant secret or customer-supplied data encryption key.

1. Create a certificate that is compatible with customer-supplied (BYOK) key material. See “Generate a BYOK-Compatible Certificate” in the Platform Encryption REST API Developer Guide.
2. Then upload your matching key material and key material hash. Include the unique name of the compatible certificate. The key material is uploaded in encrypted form.

```

      TenantSecret secret = new TenantSecret ();
      secret.description = 'New uploaded secret';
      secret.type= ‘Data’;
      secret.SecretValue = ...
      EncodingUtil.base64Decode('...');;
      secret.SecretValueCertificate = ...;
      secret.SecretValueHash = ...
      EncodingUtil.base64Decode('...');
      insert secret;
```

   You can use this script to generate a customer-supplied tenant secret and tenant secret hash.

3. Validate that the key material is uploaded.

You can opt out of key derivation on a key-by-key basis when you upload key material. When you upload your key material, specify `‘Source’:UPLOADED` and `'KeyDerivationMode':'NONE'`, and set non-null values for the SecretValueCertificate, SecretValue, and SecretValueHash.

Here's an example of how to import a tenant secret of the `Data` type.

```
TenantSecret secret = [SELECT Id FROM TenantSecret WHERE Type = 'Data' AND Version = 2];
secret.SecretValue = "<previously_exported_secret_as_a_String>";
update secret;
```

You can also export a tenant secret by writing the `secret.SecretValue` to a file. Here's an example that uses a tenant secret of the `SearchIndex` type.

```
TenantSecret secret = [SELECT SecretValue FROM TenantSecret WHERE Type = 'TenantSecret'
AND Version = 2];
secret.SecretValue =...;
update secret;
```

Here's an example of how to destroy a tenant secret of the `Data` type.

Warning: Your tenant secret is unique to your organization and to the specific data to which it applies. Once you destroy a tenant secret, related data is not accessible unless you previously exported the key and then import the key back into Salesforce.

```
TenantSecret secret = [SELECT Id FROM TenantSecret WHERE Type = 'Data' AND Version = 2];
secret.SecretValue = NULL;
update secret;
```

Territory

Represents a flexible collection of accounts and users where the users have at least read access to the accounts, regardless of who owns the accounts. Only available if territory management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field	Details
AccountAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Account access level granted to users assigned to this territory.
CaseAccessLevel	**Type** picklist **Properties** Create, Filter, Nillable, Group, Sort, Update

Field	Details
	Description Case access level granted to users assigned to this territory.
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Nillable, Sort **Description** A value that represents the type of access granted to the target Group, UserRole, or User for any associated contacts. The possible values are: • `None` • `Read` • `Edit` Note: When `DefaultContactAccess` is set to "Controlled by Parent," you can't create or update this field.
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the territory that is 1,000 characters or less.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Territory Name** in the user interface. This field is available in API version 24.0 and later. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.

Field	Details
ForecastUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Forecast Manager, who is the user to whom forecasts from this territory's child territories roll up.
MayForecastManagerShare	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the forecast manager can manually share their own forecast.
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** A name for the territory. Limit is 80 characters. Corresponds to **Label** on the user interface.
OpportunityAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** Opportunity access level granted to users assigned to this territory.
ParentTerritoryID	**Type** reference **Properties** Create, Filter, Nillable, Update **Description** Territory immediately above this territory in the territory hierarchy. Label is **Parent Territory ID**.
RestrictOppTransfer	**Type** boolean **Properties** Create, Defaulted on create, Filter, Update

Field	Details
	Description Indicates whether the opportunities associated with this territory are kept within the bounds of this territory and this territory's children when account assignment rules are run (`true`), or if opportunities associated with this territory can be assigned to other nodes of the territory hierarchy when account assignment rules are run (`false`). Label is **Confine Opportunity Assignment**.

Usage

Use the Territory object to query your organization's territory hierarchy. Use it to obtain valid territory IDs when querying or modifying records associated with territories.

SEE ALSO:

- AccountTerritoryAssignmentRule
- AccountTerritoryAssignmentRuleItem
- UserTerritory

Territory2

Represents a sales territory. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Represents the default account record access levels for users that are assigned to the territory. Values are: • `Read Only` • `Read/Write` • `Owner`
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Represents the default case record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`
`ContactAccessLevel`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Represents the default contact record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The description of the territory.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field Name	Details
	Description Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the territory. The field label in the user interface is `Label`.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Represents the default opportunity record access levels for users that are assigned to the territory. Values are: • `Private` • `Read Only` • `Read/Write`
`ParentTerritory2Id`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the territory's parent territory (if any). If the territory has no parent territory, this value is `null`.
`Territory2ModelId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory model that the territory belongs to.

Field Name	Details
Territory2TypeId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the territory type that the territory belongs to.

Territory2Model

Represents a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

create(), delete(), describeLayout(), describeSObjects(), getDeleted(), getUpdated(), query(), retrieve(), update(), upsert()

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your organization’s sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
ActivatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory model was activated.
DeactivatedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the territory model was archived.
Description	**Type** textarea

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The description of the territory model.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Model Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`LastOppTerrAssignEndDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Read-only. The date when the opportunity territory assignment filter was last run. Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33).
`LastRunRulesEndDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the last rules run was completed.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The territory model name. The field label in the user interface is `Label`.

Field Name	Details
State	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The state of the territory model. Values are: `Planning`, `Activating`, `Activation Failed`, `Active`, `Archiving`, `Archiving Failed`, `Archived`, `Deleting`, and `Deletion Failed`.

Territory2ModelHistory

Represents the history of changes to the values in the fields on a territory model. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field whose value was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the changed field.
OldValue	**Type** anyType **Properties** Nillable, Sort

Field Name	Details
	Description The previous value of the changed field.
`Territory2ModelId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the territory model whose history is tracked.

Usage

This object is automatically generated whenever any field value changes on a territory model record. Use this object it to identify those changes.

Territory2Type

Represents a category for territories (Territory2). Every Territory2 must have a Territory2Type. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

All users (including standard users) have access to this object in the user interface

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The description of the territory type.
`DeveloperName`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Sort, Update **Description** Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The field label in the user interface is `Territory Type Name`. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`Language`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The language of the master label in the user interface.
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required The user interface label for the territory type.
`Priority`	**Type** int **Properties** Create, Filter, Group, SortUpdate **Description** Required. Used for Filter-Based Opportunity Territory Assignment (Pilot in Spring '15 / API version 33). Lets you specify a priority for a territory type. For opportunity assignments, the filter examines all territories assigned to the account that the opportunity is assigned to. The account-assigned territory whose territory type priority is highest is then assigned to the opportunity. The `priority` field value on each territory type must be unique. Further, if there are multiple territories with the same territory type (and therefore the same priority) assigned to the account, no territory is assigned to the opportunity.

TestSuiteMembership

Associates an Apex class with an ApexTestSuite. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Description
`ApexClassId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The Apex class whose tests are to be executed.
`ApexTestSuiteId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The test suite to which the Apex class is assigned.

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
    AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

SEE ALSO:

ApexTestSuite

ThirdPartyAccountLink

Represents the list of external users who authenticated using an Auth. Provider. This object is available in API version 32.0 and later.

A list of third-party account links is generated when users of an organization authenticate using an external Auth. Provider. Use this object to list and revoke a given user's social sign-on connections (such as Facebook©).

Supported Calls

`describeSObjects()`, `query()`

Fields

Field Name	Details
`Handle`	**Type** string **Properties** Filter, Nillable, Sort **Description** The username in the third-party system.
`IsNotSsoUsable`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Support for single sign-on. If *true*, the link cannot be used for a single sign-on flow. It is only available OAuth access and refresh tokens.
`Provider`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The third-party account provider name.
`RemoteIdentifier`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The unique ID for the user in the third-party system.
`SsoProvider`	**Type** AuthProvider on page 388

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The foreign key to the AuthProvider of the third-party system.
`SsoProviderId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID associated with the `SsoProvider` value.
`SsoProviderName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The name associated with the AuthProvider of the third-party system, in case the user has no access to the provider foreign key (the `SsoProvider` value).
`ThirdPartyAccountLinkKey`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A concatenated string including the organization ID, the `SsoProviderId` value, the `SsoProvider` value, and the `RemoteIdentifier` value.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The Salesforce user associated with this third-party account link.

Usage

Administrators (with the “Manage Users” permission) querying this object can see all the links for all users in the organization. Without the “Manage Users” permission, users can only retrieve their own links. A user might not have access to the `SsoProvider` value (the foreign key). In this case, use the `SsoProviderName` to render the name of the provider for the associated link.

Use the Apex method `Auth.AuthToken.revokeAccess()` to revoke a link.

To make the ThirdPartyAccountLink standard object writable for Salesforce admins, contact Salesforce Customer Support. With this feature, you can easily add or delete third-party account links using the API, but you can't update existing account links.

In API version 34.0 and later, this object was enhanced to help manage high instance counts. A `query()` call returns up to 500 rows. A `queryMore()` call returns 500 more, up to 2500 total. No more records are returned after 2500. To make sure that you don't miss any records, issue a `COUNT()` query in a SELECT clause for ThirdPartyAccountLink. This query gives you the total number of records. If there are more than 2500 records, divide your query by filtering on fields, like `UserId`, to return subsets of less than 2500 records.

TimeSheet

Represents a schedule of a service resource's time in field service.

Time sheets are composed of time sheet entries, which typically track individual tasks like travel or asset repair.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
`EndDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The last day the time sheet covers.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the time sheet.
`ServiceResourceId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The service resource whose time is being tracked with the time sheet.
`StartDate`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The first day the time sheet covers.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The status of the time sheet. The picklist includes the following values, which can be customized: • New • Submitted • Approved
`TimeSheetEntryCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** (Read Only) The number of related time sheet entries.
`TimeSheetNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the time sheet.

TimeSheetEntry

Represents a span of time that a service resource spends on a field service task.

Time sheets are composed of time sheet entries. Time sheet entries typically track individual tasks like travel or asset repair.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
CurrencyIsoCode	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only if the multicurrency feature is enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`. Time sheet entries inherit their time sheet's currency code. Updates to a time sheet's currency code aren't reflected in existing time sheet entries' currency code.
Description	**Type** textarea **Properties** Create, Nillable, Update **Description** Notes on how the time was spent. For example, "This service took longer than normal because the machine was jammed."
EndTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time the activity finished.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.
`StartTime`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time the activity began.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the time sheet entry. The picklist includes the following values, which can be customized: • New • Submitted • Approved
`Subject`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Activity performed; for example, repair, lunch, or travel.
`TimeSheetEntryNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, Sort **Description** An auto-generated number identifying the time sheet entry.
`TimeSheetId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The time sheet associated with the time sheet entry.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The type of work performed. The picklist includes the following values, which can be customized: • Direct • Indirect
`WorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order related to the time sheet entry. Work orders are searchable by their content.
`WorkOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order line item related to the time sheet entry. Work order line items are searchable by their content.

TimeSheetEntryFeed

Represents a single feed item on a time sheet entry record detail page.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn’t create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the TimeSheetEntry object
- "Moderate Chatter"

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when Type is TextPost. Optional when Type is ContentPost orLinkPost.
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** true indicates that the body of the feed contains rich text. false indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the time sheet entry record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a content post. This field is null for all posts, except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the LinkURL field is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

TimeSheetEntryHistory

Represents the history of changes made to tracked fields on a time sheet entry in field service.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`TimeSheetEntryId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the time sheet entry being tracked. The history is displayed on the detail page for this record.

TimeSheetFeed

Represents a single feed item on a time sheet record detail page.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the TimeSheet object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`InsertedById`	**Type** reference

Field Name	Details
	Properties Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the time sheet record tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort

Field Name	Details
	Description ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the `LinkURL` field is the URL, and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

TimeSheetHistory

Represents the history of changes made to tracked fields on a time sheet in field service.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.

Field Name	Details
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
TimeSheetId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the time sheet being tracked. The history is displayed on the detail page for this record.

TimeSheetOwnerSharingRule

Represents the rules for sharing a time sheet with user records other than the owner or anyone above the owner in the role hierarchy.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A time sheet owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`ServiceResourceAccessLevel`	**Type** picklist

Field	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • `Read` • `Edit` • `All`
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

TimeSheetShare

Represents a sharing entry on a field service time sheet.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the time sheet. The possible values are: • *`Read`*

Field Name	Details
	• *Edit* • *All* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default time sheet access level.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The time sheet associated with the sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *Manual* (default). Valid values include: • *Manual*—The user or group has access because a user with "All" access manually shared the time sheet. • *Owner*—The user is the owner of the time sheet. • *Team*—The user or group has team access. • *Rule*—The user or group has access via a time sheet sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the time sheet.

TimeSlot

Represents a period of time on a specified day of the week during which field service work can be performed. Operating hours consist of one or more time slots. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`DayOfWeek`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The day of the week when the time slot takes place.
`EndTime`	**Type** time **Properties** Create, Filter, Sort, Update **Description** The time when the time slot ends.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed a record related to this record.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
`OperatingHoursId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The operating hours that the time slot belongs to. An operating hours' time slots appear in the Operating Hours related list.
`StartTime`	**Type** time **Properties** Create, Filter, Sort, Update **Description** The time when the time slot starts.
`TimeSlotNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the time slot. The name is auto-populated to a day and time format—for example, `Monday 9:00 AM - 10:00 PM`—but you can manually update it if you wish.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of time slot. Possible values are *`Normal`* and *`Extended`*. You may choose to use *`Extended`* to represent overtime shifts.

Usage

Operating hours are composed of time slots, which indicate the hours of operation for a particular day. After you create operating hours, create time slots for each day. For example, if the operating hours should be 8 AM to 5 PM Monday through Friday, create five time slots, one per day. To reflect breaks such as lunch hours, create multiple time slots in a day: for example, *`Monday 8:00 AM - 12:00 PM`* and *`Monday 1:00 PM - 5:00 PM`*.

Tip: Time slots don't come with any built-in rules, but you can create Apex triggers that limit time slot settings in your org. For example, you may want to restrict the start and end times on time slots to half-hour increments, or to prohibit end times later than 8 PM.

TimeSlotHistory

Represents the history of changes made to tracked fields on a time slot. This object is available in API version 38.0 and later.

Supported Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and field tracking for time slot fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`TimeSlotId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the time slot being tracked. The history is displayed on the detail page for this record.

Topic

Represents a topic on a Chatter post or record. This object is available in API version 28.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Fields

Field Name	Details
`Description`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the topic.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update Note: You can change only the spacing and capitalization of a topic name with the update property. **Description** Name of the topic.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Identifier of the community to which the Topic belongs. This field is available only if Salesforce Communities is enabled in your organization.

Field Name	Details
`TalkingAbout`	**Type** int **Properties** Filter, Group, Sort **Description** Number of people talking about the topic over the last two months, based on factors such as topic additions and comments on posts with the topic.

Usage

Use this object to query a specific topic or to get a list of all topics, even those used solely in private groups and on records, and the number of people talking about them.

Use this object to create, edit, or delete topics. To create a topic, you must have the "Create Topics" permission. To edit a topic, you must have the "Edit Topics" permission. To delete a topic, you must have the "Delete Topics" or "Modify All Data" permission.

TopicAssignment

Represents the assignment of a topic to a specific feed item, record, or file. This object is available in API version 28.0 and later.

Administrators must enable topics for objects before users can add topics to records of that object type. Topics for most objects are available in API version 30.0 and later. Topics for ContentDocument are available in API version 37.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`EntityId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Identifier of the feed item, record, or file.
`EntityKeyPrefix`	**Type** string **Properties** Filter, Group, idLookup, Sort

Field Name	Details
	Description The first three digits of the `EntityID` field, which identify the object type (account, opportunity, etc). This read-only field is available in API version 32.0 and later. Interface label is “Record Key Prefix,” which appears only in reports.
`EntityType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The standard name for the object type (account, opportunity, etc). This read-only field is available in API version 33.0 and later. Interface label is “Object Type,” which appears only in reports. Tip: In most cases, you should use this field rather than `EntityKeyPrefix`, which exists primarily to support older reports.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Identifier of the community to which the TopicAssignment belongs. This field is available only if Salesforce Communities is enabled in your organization.
`TopicId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Identifier of the topic.

Usage

Use this object to query the assignments of topics to feed items, records, or files. To assign or remove topics, you must have the “Assign Topics” permission.

In SOQL `SELECT` syntax, this object supports nested semi-joins, allowing queries on Knowledge articles assigned to specific topics. For example:

```
SELECT parentId FROM KnowledgeArticleViewStat
    WHERE parentId in (SELECT KnowledgeArticleId FROM KnowledgeArticleVersion
```

```
WHERE publishStatus = 'Online' AND language = 'en_US'
AND  Id in (select EntityId from TopicAssignment where TopicId ='0T0xx0000000xxx'))
```

No SOQL limit if logged-in user has “View All Data” permission. If not, do one of the following:

- Specify a LIMIT clause of 1,100 records or fewer.
- Filter on `Id` or `Entity` when using a `WHERE` clause with "=".

SEE ALSO:

Topic

FeedItem

TopicFeed

Represents a single feed item on a topic page. This object is available in API version 29.0 and later.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn’t create, you must have one of these permissions:

- “Modify All Data”
- “Moderate Chatter”

Note: Users with the “Moderate Chatter” permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is `TextPost` or `AdvancedTextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
ConnectionId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
ContentData	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.

Field Name	Details
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is the size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is the MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>`

Field Name	Details
	• `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field Name	Details
	• `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the topic.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. For Work.com thanks posts, it's the ID of the WorkThanks object associated with a `RypplePost`. This field is typically null for all posts except `ContentPost` and `RypplePost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of FeedItem: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email

Field Name	Details
	tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event.

Field Name	Details
	• `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

TopicLocalization—Beta

Represents the translated version of a topic name. Topic localization applies only to navigational and featured topics in communities. This object is available in API version 33.0 and later.

Supported Calls

create(),delete(),describeSObjects(),getDeleted(),getUpdated(),query(),retrieve(),update(),upsert()

Special Access Rules

Users with the Translation Workbench enabled can view topic translations, but the "Customize Application," "Manage Translation," or "Manage Categories" permission is required to create or update them.

Fields

Field Name	Details
Language	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The combined language and locale ISO code, which controls the language for labels displayed in an application. (The values in this field are not related to the default locale selection.) This picklist contains the following fully-supported languages: • Chinese (Simplified): zh_CN • Chinese (Traditional): zh_TW • Danish: da • Dutch: nl_NL • English: en_US • Finnish: fi • French: fr • German: de • Italian: it • Japanese: ja • Korean: ko • Norwegian: no • Portuguese (Brazil): pt_BR • Russian: ru • Spanish: es • Spanish (Mexico): es_MX • Swedish: sv • Thai: th The following end-user only languages are available. • Arabic: ar

Field Name	Details
	• Bulgarian: bg • Croatian: hr • Czech: cs • English (UK): en_GB • Greek: el • Hebrew: iw • Hungarian: hu • Indonesian: in • Polish: pl • Portuguese (European): pt_PT • Romanian: ro • Slovak: sk • Slovenian: sl • Turkish: tr • Ukrainian: uk • Vietnamese: vi The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: sq • Arabic (Algeria): ar_DZ • Arabic (Bahrain): ar_BH • Arabic (Egypt): ar_EG • Arabic (Iraq): ar_IQ • Arabic (Jordan): ar_JO • Arabic (Kuwait): ar_KW • Arabic (Lebanon): ar_LB • Arabic (Libya): ar_LY • Arabic (Morocco): ar_MA • Arabic (Oman): ar_OM • Arabic (Qatar): ar_QA • Arabic (Saudi Arabia): ar_SA • Arabic (Sudan): ar_SD • Arabic (Syria): ar_SY • Arabic (Tunisia): ar_TN • Arabic (United Arab Emirates): ar_AE • Arabic (Yemen): ar_YE • Armenian: hy • Basque: eu

Field Name	Details
	• Bosnian: `bs` • Bengali: `bn` • Catalan: `ca` • Chinese (Simplified—Singapore): `zh_SG` • Chinese (Traditional—Hong Kong): `zh_HK` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU` • English (Canada): `en_CA` • English (Hong Kong): `en_HK` • English (India): `en_IN` • English (Ireland): `en_IE` • English (Malaysia): `en_MY` • English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • French (Belgium): `fr_BE` • French (Canada): `fr_CA` • French (Luxembourg): `fr_LU` • French (Switzerland): `fr_CH` • Georgian: `ka` • German (Austria): `de_AT` • German (Belgium): `de_BE` • German (Luxembourg): `de_LU` • German (Switzerland): `de_CH` • Hindi: `hi` • Icelandic: `is` • Irish: `ga` • Italian (Switzerland): `it_CH` • Latvian: `lv` • Lithuanian: `lt` • Luxembourgish: `lb` • Macedonian: `mk` • Malay: `ms` • Maltese: `mt` • Romanian (Moldova): `ro_MD` • Montenegrin: `sh_ME` • Romansh: `rm`

Field Name	Details
	• Serbian (Cyrillic): `sr` • Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO` • Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Tagalog: `tl` • Tamil: `ta` • Urdu: `ur` • Welsh: `cy`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This

Field Name	Details
	field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID that identifies the topic. After a TopicLocalization record is created, this ID can't be modified.
`Value`	**Type** string **Properties** Create, Filter, Sort, Update **Description** The translated text for the topic name. Label is **Topic Name Translation**.

TopicUserEvent

Represents an action (such as comment, post, like, or share) made by a user on a topic. This object is available in API version 42.0 and later.

Supported Calls

`delete()`, `query()`, `retrieve()`

Special Access Rules

Only users with the "Modify All Data" permission can view and delete these data.

Fields

Field	Details
`ActionEnum`	**Type** picklist

Field	Details
	Properties Filter, Group, Restricted picklist, Sort, Update **Description** The action taken by a user on a topic. The possible values are: • LIKE • COMMENT • POST • ASSIGN • SHARE • FAVORITE • UNFAVORITE • AT_MENTION • BANG_MENTION • COMMENT_LIKE • USER_ENDORSEMENT • SKILL_PEER_ENDORSEMENT • SKILL_SELF_ENDORSEMENT • BEST_ANSWER
`NetworkID`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the network (community) where the action was performed.
`TopicId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Identifier of the topic.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Unique Salesforce user ID.

Usage

Use the TopicUserEvent object to delete topic-related activities by community users who would like all their topic-related activities to be removed from a community.

TwoFactorInfo

Stores a user's secret for two-factor operations. Use this object when customizing two-factor authentication in your organization. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

You need the "Manage Two-Factor Authentication in API" permission to create or update this object.

Fields

Field Name	Details
`SharedKey`	**Type** string **Properties** Create, Group, Sort, Update **Description** This field is never read-enabled, though it is write-enabled. A request for this value always returns `null`. The value must be a base32-encoded string of a 20-byte secret. You can use the Apex method `Auth.SessionManagement.getQrCode()` to get a value to write to this field. Note: If you write a secret to this field, in API version 37.0 and later the user gets an email notification that a new identity verification method was added to the user's account.
`Type`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The two-factor method.

Field Name	Details
	• TOTP—The time-based one-time password.
UserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID for the user who's associated with the authentication secret.

TwoFactorMethodsInfo

Stores information about which identity verification methods a user has registered. This object is available in API version 37.0 and later.

Supported Calls

describeSObjects(), query()

Special Access Rules

You need the "Manage Two-Factor Authentication in API" permission to access this object.

Fields

Field Name	Details
ExternalId	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A unique system-generated numerical identifier for the user.
HasSalesforceAuthenticator	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If true, the user has connected the Salesforce Authenticator mobile app. The user can verify identity by approving a notification sent to the app. If the user sets a trusted location in the app, Salesforce Authenticator verifies automatically when the user is in the trusted location.

Field Name	Details
HasTempCode	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has a temporary verification code generated by a Salesforce admin or user with “Manage Two-Factor Authentication in User Interface” permission.
HasTotp	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has connected an authenticator app that generates verification codes, also known as time-based one-time passwords (TOTP). The user can verify identity by entering a code generated by the app.
HasU2F	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has registered a U2F security key. The user can verify identity by inserting the security key into a USB port to generate credentials.
HasUserVerifiedEmailAddress	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has self-registered and verified an email address. This parameter is available in API version 43 and later.
HasUserVerifiedMobileNumber	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has self-registered and verified a mobile phone number. Salesforce can text a verification code to the user at that number. This parameter is available in API version 43 and later.

Field Name	Details
HasVerifiedMobileNumber	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the user has a mobile phone number that was added by an administrator or self-registered by the user. Salesforce can text a verification code to the user at that number.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the user who's associated with the identity verification methods.

TwoFactorTempCode

Stores information about a user's temporary identity verification code. This object is available in API version 37.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

You need the "Manage Two-Factor Authentication in API" permission to access this object.

Fields

Field Name	Details
Expiration	**Type** dateTime **Properties** Filter, Sort **Description** The date and time when the temporary verification code expires. The code expires in 1 to 24 hours after it's generated. Salesforce admins and non-admin users with the "Manage Two-Factor Authentication in User Interface" permission set the expiration time when generating the code.

Field Name	Details
Identifier	**Type** string **Properties** Filter, Group, Sort **Description** The unique identifier for the temporary code. This is a required field that can take any value.
TempCode	**Type** encryptedstring **Description** A request for this value always returns `null`.
UserId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for the user who's associated with the temporary verification code.

UndecidedEventRelation

Represents invitees with the status `Not Responded` for a given event. This object is available in API versions 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
EventId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the event.

Field Name	Details
`RelationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** Indicates the ID of the invitee.
`RespondedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** This field is always `null`.
`Response`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates the content of the response field. Label is `Comment`.
`Type`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** Indicates whether the invitee is a user, lead or contact, or resource.

Usage

Query invitees who have not responded to an invitation to an event

```
SELECT eventId, type, response FROM UndecidedEventRelation WHERE
eventid='00UTD000000ZH5LA'
```

SEE ALSO:

AcceptedEventRelation

DeclinedEventRelation

User

Represents a user in your organization.

Supported Calls

`create()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- To create or update a User record, you must have the “Manage Internal Users” permission. Additionally, if the user is a Customer Portal user, you must have the “Edit Self-Service Users” permission, and if the user is a partner portal user, you must have the “Manage External Users” permission.
- If Communities is enabled in your organization, to create or update external users for Customer Portal, partner portal, or Communities, you must also have the “Manage External Users” permission.
- Information in hidden fields in a user's profile is not searchable by external users (with a portal profile) in a community. For example, if a user in a community has a hidden email address and an external user searches for it, the user record is not returned in the search results. Hidden field values are also not returned when external users perform searches on non-hidden fields. So if an external user searches for a user's name (cannot be hidden), any hidden field values associated with the user record (for example, a hidden email address) are not returned in the search results.

  Internal users from your organization who belong to the same community, however, can both search for and view hidden field values in search results.
- When requested by portal users, queries that look up to the User object, such as `owner.name` or `owner.email` might not return values when the portal user making the request doesn’t have Read access to the User record being queried.

  The behavior depends on the number of domains associated with the lookup field. If the object can look up to more than one domain, `owner.name` returns a value, but other detail fields don’t. For example, Case owner can look up to the User or Queue objects. In this case, portal users can see only the value of `owner.name`. Other User detail fields, such as `owner.email` or `owner.phone` don’t return a value.

  If the object can look up to only a single domain, such as Account owner, then no detail fields return values, including `owner.name`.
- Changing ownership of a record by updating its `OwnerId` field requires the user making the change to have both the “Transfer Record” permission and Read access to the User record of the new record owner.

Fields

Field	Details
`AboutMe`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update

Field	Details
	Description Information about the user, such as areas of interest or skills. This field is available even if Chatter is disabled.
`AccountId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the Account associated with a Customer Portal user. This field is null for Salesforce users.
`Address` (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
`Alias`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user's alias. For example, `jsmith`.
`BadgeText`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The text description of a user badge that appears over a user's photo. Users of the same Chatter user type (internal, external) are badged. Different user types are not badged.
`BannerPhotoUrl`	**Type** string **Properties** Filter, Nillable, Sort

Field	Details
	Description The URL for the user's banner photo. This field is available in API version 36.0 and later.
`CallCenterId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** If Salesforce CRM Call Center is enabled, represents the call center to which this user is assigned.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city associated with the user. Up to 40 characters allowed.
`CommunityNickname`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Name used to identify this user in the Community application, which includes the ideas and answers features.
`CompanyName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name of the user's company.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the Contact associated with this account. The contact must have a value in the `AccountId` field or an error occurs.

Field	Details
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The country associated with the user. Up to 80 characters allowed.
`CountryCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO country code associated with the user.
`CurrentStatus`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Text that describes what the user is working on. Note: If you update this field, the API automatically adds a post of type `UserStatus` on the user's profile in Chatter. This field is deprecated in API version 25.0. To achieve similar behavior, post to the user directly by creating a FeedItem with the user's ParentId.
`DefaultCurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Nillable, Restricted picklist, Update **Description** The user's default currency setting for new records. For example, a user in France could have a `DefaultCurrencyIsoCode` set to Euros, and that would be their default currency in the application. Only applicable for organizations that use multiple currencies.
`DefaultDivision`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description This record's default division. Only applicable if divisions are enabled for your organization.
`DefaultGroupNotificationFrequency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Required. The default frequency for sending the user's Chatter group email notifications when the user joins groups. The valid values are: • `P`—Email on every post • `D`—Daily digests • `W`—Weekly digests • `N`—Never The default value is `N`. For Professional, Enterprise, Unlimited, and Developer Edition organizations that existed prior to API version 22.0, the default value remains `D`. This field is available in API version 21.0 and later.
`DelegatedApproverId`	**Type** reference **Properties** Create, Filter, Group, Nillable,Sort, Update **Description** Id of the user who is a delegated approver for this user.
`Department`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The company department associated with the user.
`DigestFrequency`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Field	Details
	Description Required. The frequency at which the system sends the user's Chatter personal email digest. The valid values are: • `D` = Daily • `W` = Weekly • `N` = Never The default value is `D`.
`Division`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The division associated with this user, similar to Department and unrelated to `DefaultDivision`.
`Email`	**Type** email **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. The user's email address.
`EmailEncodingKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The email encoding for the user, such as `ISO-8859-1` or `UTF-8`.
`EmailPreferencesAutoBcc`	**Type** boolean **Properties** Create, Filter, Update **Description** Determines whether the user receives copies of sent emails. This option applies only if compliance BCC emails are not enabled.
`EmployeeNumber`	**Type** string

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The user’s employee number.
`Extension`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user’s phone extension number.
`Fax`	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user’s fax number.
`FederationIdentifier`	**Type** string **Properties** Create, Filter, idLookup, Nillable, Sort, Update **Description** Indicates the value that must be listed in the `Subject` element of a Security Assertion Markup Language (SAML) *IDP certificate* to authenticate the user for a client application using single sign-on. This value must be specified if the `SAML User ID Type` is Assertion contains Federation ID from the User record. Otherwise, this field can’t be edited.
`FirstName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user’s first name.
`ForecastEnabled`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether the user is enabled as a Forecast Manager (`true`) or not (`false`) in customizable forecasting. Forecast managers see forecast rollups from users below them in the forecast hierarchy.
`FullPhotoUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The URL for the user's profile photo. This field is available even if Chatter is disabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
`IndividualId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the data privacy record associated with this user. This field is available if Data Protection and Privacy is enabled.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Indicates whether the user has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user is a partner who has access to the partner portal (`true`) or not (`false`). This field is not available for release 9.0 and later. Instead, use `UserType` with the value `Partner` or `Power Partner`.
`IsPortalEnabled`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user has access to Communities or portals (`true`) or not (`false`). This field is only available if one of the following conditions is true: • Communities are enabled in your organization and you have community or portal user licenses • Portals are enabled in your organization
`IsPortalSelfRegistered`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user is a Customer Portal user who self-registered for your organization's Customer Portal (`true`) or not (`false`). This field is not available for release 9.0 and earlier.
`IsPrmSuperUser`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Available for partner portal users only. Indicates whether the user has super user access in the partner portal (`true`) or not (`false`). This field is available in API version 24.0 and later. Note: This field is not automatically enabled. Contact Salesforce to enable this field.
`IsProfilePhotoActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has a profile photo (`true`) or not (`false`). This field is available in API version 36.0 and later.
`JigsawImportLimitOverride`	**Type** int **Properties** Create, Filter, Group Nillable, Sort, Update **Description** The Data.com user's monthly addition limit. The value must be between zero and the organization's monthly addition limit. Label is **Data.com Monthly Addition Limit**. This field is available in API version 27.0 and later.
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. The user's language, such as "French" or "Chinese (Traditional)." Label is **Language**.
`LastLoginDate`	**Type** dateTime **Properties** Filter, Sort, Nillable **Description** The date and time when the user last successfully logged in. This value is updated if 60 seconds have elapsed since the user's last login.

Field	Details
LastName	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. The user's last name.
LastReferencedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed a record related to this record.
LastViewedDate	**Type** date **Properties** Filter, Nillable, Sort, Update **Description** The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (LastReferencedDate) and not viewed.
Latitude	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
LocaleSidKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This field is a restricted picklist field. The value of the field affects formatting and parsing of values, especially numeric values, in the user interface. It does not affect the API.

Field	Details
	The field values are named according to the language, and country if necessary, using two-letter ISO codes. The set of names is based on the ISO standard. It can often be more convenient to manually set a user's locale in the user interface, and then use that value for inserting or updating other users via the API.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Manager`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** User lookup field used to select the user's manager. This establishes a hierarchical relationship, preventing you from selecting a user that directly or indirectly reports to itself.
`ManagerId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The Id of the user who manages this user.
`MediumBannerPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the medium sized user profile banner photo.
`MiddleName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field	Details
	Description The user's middle name. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.
MobilePhone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's mobile or cellular phone number.
Name	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`. Limited to 121 characters.
OfflineTrialExpirationDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time when the user's Connect Offline trial expires.
Phone	**Type** phone **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's phone number.
PortalRole	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The role of the user in the Customer Portal (either Executive, Manager, User, or PersonAcount). Prior to API version 16.0, you could set this field to null and the system automatically included a portal role. In API version 16.0 and above, when

Field	Details
	you set this field to null, a portal role is not automatically created. When this field is null and a `ContactId` is provided, the user is assigned to the User role. The Update property is available in API version 43.0 and later. The field is available if Customer Portal is enabled OR Communities is enabled and have available partner portal, Customer Portal, or High-Volume Portal User licenses.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's postal or ZIP code. Label is **Zip/Postal Code**.
`ProfileId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Required. ID of the user's Profile. Use this value to cache metadata based on profile. In earlier releases, this was `RoleId`.
`ReceivesAdminInfoEmails`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user receives email for administrators from Salesforce (`true`) or not (`false`).
`ReceivesInfoEmails`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the user receives informational email from Salesforce (`true`) or not (`false`).
`SenderEmail`	**Type** email

Field	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The email address used as the From address when the user sends emails. This is the same value shown in Setup on the My Email Settings page.
`SenderName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The name used as the email sender when the user sends emails. This is the same value shown in Setup on the My Email Settings page.
`Signature`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The signature text added to emails. This is the same value shown in Setup on the My Email Settings page.
`SmallBannerPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the small user profile banner photo.
`SmallPhotoUrl`	**Type** string **Properties** Filter, Nillable, Sort **Description** The URL for a thumbnail of the user's profile photo. This field is available even if Chatter is disabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo. This field is available in API version 20.0 and later.

Field	Details
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state associated with the User. Up to 80 characters allowed.
`StateCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ISO state code associated with the user.
`Street`	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street address associated with the User.
`Suffix`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's name suffix. Maximum size is 40 characters. Contact Salesforce Customer Support to enable this field.
`TimeZoneSidKey`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. This field is a restricted picklist field. A User time zone affects the offset used when displaying or entering times in the user interface. However, the API does not use a User time zone when querying or setting values. Values for this field are named using region and key city, according to ISO standards. It can often be more convenient to manually set one User time zone in the user interface, and then use that value for creating or updating other User records via the API.

Field	Details
Title	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user's business title, such as "Vice President."
Username	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Contains the name that a user enters to log in to the API or the user interface. The value for this field must be in the form of an email address, and all characters should be lowercase. It must also be unique across all organizations. If you try to create or update a User with a duplicate value for this field, the operation is rejected. Each inserted User also counts as a license. Every organization has a maximum number of licenses. If you attempt to exceed the maximum number of licenses by inserting User records, the create is rejected.
UserPermissionsCallCenterAutoLogin	**Type** boolean **Properties** Create, Filter, Update **Description** Required if Salesforce CRM Call Center is enabled. Indicates whether the user is enabled to use the auto login feature of the call center (`true`) or not (`false`).
UserPermissionsChatterAnswersUser	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the portal user is enabled to use the Chatter Answers feature (`true`) or not (`false`). This field defaults to `false` when a Customer Portal user is created from the API.
UserPermissionsInteractionUser	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Indicates whether the user can run flows or not. Label is **Lightning Platform Flow User**.
`UserPermissionsJigsawProspectingUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Data.com user license (`true`) or not (`false`). The Data.com user license lets the user add Data.com contact and lead records to Salesforce in supported editions. Label is **Data.com User**.
`UserPermissionsKnowledgeUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is enabled to use Salesforce Knowledge (`true`) or not (`false`). Label is **Knowledge User**.
`UserPermissionsLiveAgentUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is enabled to use Life Agent (`true`) or not (`false`). Label is **Life Agent User**.
`UserPermissionsMarketingUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Required. Indicates whether the user is enabled to manage campaigns in the user interface (`true`) or not (`false`). Label is **Marketing User**.
`UserPermissionsOfflineUser`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Required. Indicates whether the user is enabled to use Offline Edition (`true`) or not (`false`). Label is **Offline User**.
`UserPermissionsSFContentUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Salesforce CRM Content User License (`true`) or not (`false`). Label is **Salesforce CRM Content User**. The Salesforce CRM Content User license grants the user access to the Salesforce CRM Content application.
`UserPermissionsSiteforceContributorUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Site.com Contributor feature license (`true`) or not (`false`). Label is **Site.com Contributor User**. The Site.com Contributor feature license grants the user access to the Site.com application. Users with a Contributor license can use Site.com Studio to edit site content only.
`UserPermissionsSiteforcePublisherUser`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the user is allocated one Site.com Publisher feature license (`true`) or not (`false`). Label is **Site.com Publisher User**. The Site.com Publisher feature license grants the user access to the Site.com application. Users with a Publisher license can build and style websites, control the layout and functionality of pages and page elements, and add and edit content.
`UserPermissionsSupportUser`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `true`, the user can use the Salesforce console.
`UserPermissionsWirelessUser`	**Type** boolean **Properties** Create, Update **Description** Required if the Wireless permission is enabled for your organization. Indicates whether the user is enabled to use Wireless Edition (`true`) or not (`false`). Label is **Wireless User**. Note: As of November 2005, Salesforce Wireless Edition is no longer available for purchase. If you are a Professional Edition customer and purchased Wireless Edition prior to November 7, 2005 or are an Enterprise Edition customer who has signed or renewed your Salesforce contract prior to November 7, 2005, you may continue using Wireless Edition through the end of your existing contract term.
`UserPermissionsWorkDotComUserFeature`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates whether the Work.com feature is enabled for the user (`true`) or not (`false`).
`UserPreferencesActivityRemindersPopup`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a reminder popup window automatically opens when an activity reminder is due. Corresponds to the `Trigger alert when reminder comes due` checkbox at the Reminders page in the personal settings in the user interface.
`UserPreferencesApexPagesDeveloperMode`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `true`, indicates the user has enabled developer mode for editing Visualforce pages and controllers.
`UserPreferencesContentEmailAsAndWhen`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, a user with Salesforce CRM Content subscriptions receives a once daily email summary if activity occurs on his or her subscribed content, libraries, tags, or authors. To receive email, the `UserPreferencesContentNoEmail` field must also be `false`. The default value is `false`. Note: This field is only visible when Salesforce CRM Content is enabled for your organization.
`UserPreferencesContentNoEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, a user with Salesforce CRM Content subscriptions receives email notifications if activity occurs on his or her subscribed content, libraries, tags, or authors. To receive real-time email alerts, set this field to `false` and set the `UserPreferencesContentEmailAsAndWhen` field to `true`. The default value is `false`. Note: This field is only visible when Salesforce CRM Content is enabled for your organization.
`UserPreferencesEnableAutoSubForFeeds`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the user automatically subscribes to feeds for any objects that the user creates. This field is available in API version 25.0 and later.
`UserPreferencesDisableAllFeedsEmail`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `false`, the user automatically receives email for all updates to Chatter feeds, based on the types of feed emails and digests the user has enabled. This field is available in API version 24.0 and later.
`UserPreferencesDisableAutoSubForFeeds`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically subscribes to feeds for any objects that the user creates. This field is deprecated in API version 25.0 and later. Starting with API version 25.0, use `UserPreferencesEnableAutoSubForFeeds` to enable or disable auto-follow for objects a user creates.
`UserPreferencesDisableBookmarkEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a Chatter feed item after the user has bookmarked it. This field is available in API version 24.0 and later.
`UserPreferencesDisableChangeCommentEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a change the user has made, such as an update to their profile. This field is available in API version 24.0 and later.
`UserPreferencesDisableEndorsementEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the member automatically receives email every time someone endorses them for a topic.

Field	Details
UserPreferencesDisableFileShareNotificationsForApi	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, email notifications are sent from the person who has shared a file to the users with whom the file has been shared. This field is available in API version 25.0 and later.
UserPreferencesDisableFollowersEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone starts following the user in Chatter.This field is available in API version 24.0 and later.
UserPreferencesDisableLaterCommentEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a feed item after the user has commented on the feed item. This field is available in API version 24.0 and later.
UserPreferencesDisableLikeEmail	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone likes a post or comment the user has made. This field is available in API version 24.0 and later.
UserPreferencesDisableMentionsPostEmail	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `false`, the user automatically receives email every time the user is mentioned in posts. This field is available in API version 24.0 and later.
`UserPreferencesDisableProfilePostEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone posts to the user's profile. This field is available in API version 24.0 and later.
`UserPreferencesDisableSharePostEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time the user's post is shared. This field is available in API version 24.0 and later.
`UserPreferencesDisableFeedbackEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to Work.com feedback. This includes when someone requests or offers feedback, shares feedback with the user, or reminds the user to answer a feedback request.
`UserPreferencesDisCommentAfterLikeEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email every time someone comments on a post the user has liked. This field is available in API version 24.0 and later.
`UserPreferencesDisMentionsCommentEmail`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `false`, the user automatically receives email every time the user is mentioned in comments. This field is available in API version 24.0 and later.
`UserPreferencesDisableMessageEmail`	**Type** boolean **Properties** Create, Filter, Update **Description** When `false`, the user automatically receives email for Chatter messages sent to the user. This field is available in API version 24.0 and later.
`UserPreferencesDisableRewardEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to Work.com rewards. This includes when someone gives a reward to the user.
`UserPreferencesDisableWorkEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user receives emails related to Work.com feedback, goals, and coaching. The user must also sign up for individual emails listed on the Work.com email settings page. When `true`, the user doesn't receive any emails related to Work.com feedback, goals, or coaching even if they are signed up for individual emails.
`UserPreferencesDisProfPostCommentEmail`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description When `false`, the user automatically receives email every time someone comments on posts on the user's profile. This field is available in API version 24.0 and later.
`UserPreferencesEventRemindersCheckboxDefault`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a reminder popup is automatically set on the user's events. Corresponds to the `By default, set reminder on Events to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesHideBiggerPhotoCallout`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, users can choose to hide the callout text below the large profile photo.
`UserPreferencesHideChatterOnboardingSplash`	**Type** boolean **Properties** Filter **Description** When `true`, the initial Chatter onboarding prompts do not appear.
`UserPreferencesHideCSNDesktopTask`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Desktop. This field is available in API version 26.0 and later.
`UserPreferencesHideCSNGetChatterMobileTask`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Mobile. This field is available in API version 26.0 and later.
`UserPreferencesHideEndUserOnboardingAssistantModal`	**Type** boolean **Properties** CreateFilterUpdate **Description** Reserved for future use.
`UserPreferencesHideLightningMigrationModal`	**Type** boolean **Properties** CreateFilterUpdate **Description** Reserved for future use.
`UserPreferencesHideSecondChatterOnboardingSplash`	**Type** boolean **Properties** Filter **Description** When `true`, the secondary Chatter onboarding prompts do not appear.
`UserPreferencesHideS1BrowserUI`	**Type** boolean **Properties** Create, Filter, Update **Description** Controls the interface that the user sees when logging in to Salesforce from a supported mobile browser. If `false`, the user is automatically redirected to the Salesforce mobile web. If `true`, the user sees the full Salesforce site. The default value is `false`. Label is **Salesforce User**. This field is available in API version 29.0 or later.
`UserPreferencesHideSfxWelcomeMat`	**Type** boolean

Field	Details
	Properties CreateFilterUpdate **Description** Controls whether a user sees the Lightning Experience new user message. That message welcomes users to the new interface and provides step-by-step instructions that describe how to return to Salesforce Classic.
`UserPreferencesJigsawListUser`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the user is a Data.com List user and, therefore, shares record additions from a pool. UserPermissionsJigsawProspectingUser must also be set to `true`. Label is **Data.com List User**. This field is available in API version 27.0 and later.
`UserPreferencesLightningExperiencePreferred`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, redirects the user to the Lightning Experience interface. Label is **Switch to Lightning Experience**. This field is available in API version 35.0 and later.
`UserPreferencesOptOutOfTouch`	**Type** boolean **Properties** Create, Filter, Update **Description** This field is deprecated in API version 29.0. When `false`, the user automatically accesses the Salesforce Touch app when logging in to Salesforce from an iPad. If `true`, automatic access to the Salesforce Touch app is turned off and the user's iPad is directed to the full Salesforce site instead. The default value is `false`. Note: Salesforce Touch must be enabled before this field is visible.
`UserPreferencesPathAssistantCollapsed`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `true`, Sales Path appears collapsed or hidden to the user. This field is available in API version 35.0 and later.
`UserPreferencesProcessAssistantCollapsed`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, Sales Path appears collapsed or hidden to the user. This field is available in API versions 33.0 and 34.0 only. In API versions 35.0 and later, use `UserPreferencesPathAssistantCollapsed`.
`UserPreferencesReminderSoundOff`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, a sound automatically plays when an activity reminder is due. Corresponds to the `Play a reminder sound` checkbox on the Reminders page in the user interface.
`UserPreferencesShowCityToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the city field in the user's contact information. City is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. City is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCityToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.

Field	Details
UserPreferencesShowCityToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the city field in the user's contact information. When `true`, city is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCityToExternalUsers`, making the user's city visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowCountryToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the country field in the user's contact information. Country is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Country is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCountryToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowCountryToGuestUsers	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates the visibility of the country field in the user's contact information. When `true`, country is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCountryToExternalUsers`, making the user's country visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowEmailToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the email address field in the user's contact information. Email address is visible only to internal members of the user's organization when this field is `false`. Email address is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowEmailToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the email address field in the user's contact information. When `true`, the email address is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowEmailToExternalUsers`, making the user's email address visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.

Field	Details
UserPreferencesShowFaxToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the fax number field in the user's contact information. Fax number is visible only to internal members of the user's organization when this field is `false`. Fax number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowFaxToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the fax number field in the user's contact information. When `true`, the fax number field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowFaxToExternalUsers`, making the user's fax number visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowManagerToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the manager field in the user's contact information. Manager is visible only to internal members of the user's organization when this field is `false`. Manager is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.

Field	Details
UserPreferencesShowManagerToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the manager field in the user's contact information. When `true`, the manager field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowManagerToExternalUsers`, making the user's manager visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowMobilePhoneToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the mobile or cellular phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowMobilePhoneToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the mobile phone field in the user's contact information. When `true`, the mobile phone field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowMobilePhoneToExternalUsers`, making the user's mobile phone visible to guests.

Field	Details
	When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowPostalCodeToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. Postal code is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Postal code is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowPostalCodeToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowPostalCodeToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. When `true`, postal code is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowPostalCodeToExternalUsers`, making the user's postal code visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowProfilePicToGuestUsers	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** Indicates the visibility of the user's profile photo. When `true`, the photo is visible to guest users in a community. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the stock photo. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowStateToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the state field in the user's contact information. State is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. State is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowStateToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowStateToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the state field in the user's contact information. When `true`, state is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowStateToExternalUsers`, making the user's state visible to external members.

Field	Details
	The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowStreetAddressToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the street address field in the user's contact information. The address is visible only to internal members of the user's organization when this field is `false`. The address is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowStreetAddressToGuestUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the street address field in the user's contact information. When `true`, the street address field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowStreetAddressToExternalUsers`, making the user's street address visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
UserPreferencesShowTitleToExternalUsers	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the business title field in the user's contact information. Title is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Title is visible to external members in a community when:

Field	Details
	• This field is `true`, or • This field is `false` but `UserPreferencesShowTitleToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `true`. This field is available in API version 26.0 and later.
`UserPreferencesShowTitleToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the business title field in the user's contact information. When `true`, title is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowTitleToExternalUsers`, making the user's title visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowWorkPhoneToExternalUsers`	**Type** boolean **Properties** Create, Filter, Update **Description** Indicates the visibility of the work phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowWorkPhoneToGuestUsers`	**Type** boolean **Properties** Create, Filter, Update

Field	Details
	Description Indicates the visibility of the work phone field in the user's contact information. When `true`, the work phone field is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `true`, this field overrides the value `false` in `UserPreferencesShowWorkPhoneToExternalUsers`, making the user's work phone visible to guests. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 34.0 and later.
`UserPreferencesSortFeedByComment`	**Type** boolean **Properties** Create, Filter, Update **Description** Specifies the data value used in sorting a user's feed. When `true`, the feed is sorted by most recent comment activity. When `false`, the feed is sorted by post date.
`UserPreferencesSuppressEventSFXReminders`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, event reminders don't appear. Corresponds to the **Show event reminders in Lightning Experience** checkbox on the Activity Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesSuppressTaskSFXReminders`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, task reminders don't appear. Corresponds to the **Show task reminders in Lightning Experience**. checkbox on the Activity Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesTaskRemindersCheckboxDefault`	**Type** boolean

Field	Details
	Properties Create, Filter, Update **Description** When `true`, a reminder popup is automatically set on the user's tasks. Corresponds to the `By default, set reminder on Tasks to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.
`UserPreferencesUserDebugModePref`	**Type** boolean **Properties** Create, Filter, Update **Description** When `true`, the Lightning Component framework executes in debug mode for the user. Corresponds to the `Debug Mode` checkbox on the Advanced User Details page of personal settings in the user interface.
`UserRoleId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the user's UserRole. Label is **Role ID**.
`UserType`	**Type** picklist **Properties** Filter, Group, Nillable, Sort, Restricted picklist **Description** The category of user license. Each `UserType` is associated with one or more UserLicense records. Each UserLicense is associated with one or more profiles. In API version 10.0 and later, valid values include: • Standard: user license. This user type also includes Salesforce Platform and Salesforce Platform One user licenses. Label is **Standard**. • PowerPartner: User whose access is limited because he or she is a partner and typically accesses the application through a partner portal or community. Label is **Partner**. • CSPLitePortal: user whose access is limited because he or she is an organization's customer and accesses the application through aCustomer Portal or community. Label is **High Volume Portal**.

Field	Details
	• CustomerSuccess: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal User**. • PowerCustomerSuccess: user whose access is limited because he or she is an organization's customer and accesses the application through a Customer Portal. Label is **Customer Portal Manager**. Users with this license type can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy. • CsnOnly: user whose access to the application is limited to Chatter. This user type includes Chatter Free and Chatter moderator users. Label is **Chatter Free**.
`WirelessEmail`	**Type** email **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Wireless email address associated with this user. For use with Salesforce Wireless Edition. This field is available only if the Wireless and Email permissions are enabled for your organization. Note: As of November 2005, Salesforce Wireless Edition is no longer available for purchase. If you are a Professional Edition customer and purchased Wireless Edition prior to November 7, 2005 or are an Enterprise Edition customer who has signed or renewed your Salesforce contract prior to November 7, 2005, you may continue using Wireless Edition through the end of your existing contract term.

Usage

Use this object to query information about users and to provision and modify users in your organization. Unlike other objects, the records in the User table represent actual users—not data owned by users. Any user can query or describe User records.

For example, the following SOQL code finds users with a particular user role.

```
SELECT Id, Username
FROM User
WHERE UserRoleId='00ED0000000xicT'
```

Each portal user is associated with a portal account. A portal account can have a maximum of three portal roles (Executive, Manager, and User). You can select the default number of roles to be created from the user interface. The role hierarchy is maintained when you insert and delete portal roles, and roles are created bottom-up. Deleting the User role causes the Manager role to be renamed to User role. Deleting both the Executive and User roles causes the Manager role to be renamed to User role. Before deleting a role, you must assign users under that role to another role.

Deactivate Users

You can't delete a user in the user interface or the API. You can deactivate a user in the user interface; and you can deactivate or disable a Customer Portal or partner portal user in the user interface or the API. Because users can never be deleted, we recommend that you exercise caution when creating them.

If you deactivate a user, any EntitySubscription where the user is associated with the ParentId or SubscriberId field, meaning all subscriptions both to and from the user, are soft deleted. If the user is reactivated, the subscriptions are restored. However, if you deactivate multiple users at once and these users follow each other, their subscriptions are hard deleted. In this case, the user-to-user EntitySubscription is deleted twice (double deleted). Such subscriptions can't be restored upon user reactivation.

Passwords

For security reasons, you can't query User passwords via the API or the user interface. However, the API allows you to set and "reset" User passwords using the `setPassword()` and `resetPassword()` calls. The password lockout status and the ability to reset the User locked-out status is not available via the API. You must check and reset the User password lockout status using the user interface.

SEE ALSO:

getUserInfo()

create()

update()

query()

search()

retrieve()

upsert()

update()

getUpdated()

getDeleted()

describeSObjects()

Frequently-Occurring Fields

UserRole

UserLicense

UserAccountTeamMember

Represents a User on the default account team of another User.

See also OpportunityTeamMember, which represents a User on the opportunity team of an Opportunity

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`AccountAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. For Account records that the user has added to his or her default account team, the level of access the account team member has. . The possible values are: • `Read` • `Edit` This field must be set to an access level that is higher than the organization's default access level for accounts.
`CaseAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the account team member has to Case records related to the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is higher than the organization's default access level for cases.
`ContactAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. ForContact records related to the account, the level of access that the account team member has. The possible values are: • `None` • `Read` • `Edit`

Field	Details
	This field must be set to an access level that is higher than the organization's default access level for contacts. **Note:** When `DefaultContactAccess` is set to `Controlled by Parent`, you can't create or update this field.
`OpportunityAccessLevel`	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the team member has to Opportunity records related to the account. The possible values are: • `None` • `Read` • `Edit` This field must be set to an access level that is higher than the organization's default access level for opportunities.
`OwnerId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who owns the default account team.
`TeamMemberRole`	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role that the team member has on opportunities for which the user has added his or her default account team. The valid values are set by the organization's administrator in the Account Team Roles picklist. Label is **Team Role**.
`UserId`	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the default account team. This field cannot be updated.

Usage

This object is available only in organizations that have enabled the account teams functionality, which can be done using the user interface.

If you attempt to create a record that matches an existing record, the create call updates any modified fields and returns the existing record.

You can set up a User record so the default account team includes the others who typically work with them on accounts.

UserAppInfo

Stores the last Lightning app logged in to. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`AppDefinitionId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the last Lightning app that the user logged in to. This field is available in API version 43.0 and later.
`FormFactor`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The relative size of the app as displayed. Values are: • Small—suitable for a small device like a mobile phone • Medium—suitable for a tablet • Large—suitable for a large display device, like a monitor It's possible to have three versions of the app as the one last logged in to, where each version has a different form factor.
`UserId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the user that used this app.

UserAppMenuCustomization

Represents an individual user's settings for items in the app menu or App Launcher. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ApplicationId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 15-character ID for the application associated with the menu item.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user for these specific settings.
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order value of 5 will appear between items with sort order values of 3 and 9.

Usage

See the AppMenuItem object for the organization-wide default settings This object contains the fields representing any changes the user made to the menu.

UserAppMenuCustomizationShare

Represents a sharing entry on a UserAppMenuCustomization record. This object is available in API version 35.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • `Read` • `Edit`
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Values may include: • `Manual`—The User or Group has access because a user with “All” access manually shared the UserAppMenuCustomization record with them.

Field Name	Details
	• `Owner`—The User is the owner of the UserAppMenuCustomization record or is in a role above the UserAppMenuCustomization record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the UserAppMenuCustomization record.

UserAppMenuItem

Represents the organization-wide settings for items in the app menu or App Launcher that the requesting user has access to in Setup. This object is available in API version 35.0 and later.

Supported Calls

`describeLayout()`, `describeSObjects()`, `query()`, `search()`

Fields

Field Name	Details
`AppMenuItemId`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The 15-character ID for the menu item.
`ApplicationId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 15-character ID for the application associated with the menu item.

Field Name	Details
Description	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** A description of this menu item.
IconUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The icon for the menu item's application.
InfoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL for more information about the application.
IsUsingAdminAuthorization	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the app is pre-authorized for certain users by the administrator.
IsVisible	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** If `true`, the app is visible to the user.
Label	**Type** string **Properties** Group, Nillable

Field Name	Details
	Description The app's name.
LogoUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The logo for the menu item's application. The default is the initials of the `Label` value.
MobileStartUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The location mobile users are directed to after they've authenticated. This is only used with connected apps.
Name	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The API name of the item.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that controls where this item appears in the menu. For example, a menu item with a sort order value of 5 will appear between items with sort order values of 3 and 9.
StartUrl	**Type** url **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The location users are directed to after they've authenticated. For a connected app, this is the location specified by the `StartUrl`. Otherwise it's the application's default start page.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of application represented by this item. The types are: • ConnectedApplication • Network • ServiceProvider • TabSet
`UserSortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The index value that represents where the user set this item in the menu (or App Launcher). For example, an item with a sort order value of 5 will appear between items with sort order values of 3 and 9. This value is separate from SortOrder so you can create logic incorporating both values. For example, if you want the user-sorted items to appear first, followed by the organization order for the rest, use: `SELECT ApplicationId,SortOrder,UserSortOrder FROM AppMenuItem order by userSortOrder NULLS LAST, sortOrder NULLS LAST`

Usage

See the AppMenuItem object for the organization-wide default settings This object contains the fields the requesting user has permission to see.

UserConfigTransferButton

Represents the association between a Live Agent configuration and a live chat button. This association allows users associated with a specific configuration to transfer chats to a button queue.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
LiveChatButtonId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the live chat button that agents can transfer chats to.
LiveChatUserConfigId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the Live Agent configuration; agents associated with this configuration can transfer chats to the chat button indicated by the `LiveChatButtonId`.

UserConfigTransferSkill

Represents the association between a Live Agent configuration and a skill. This association allows users associated with a specific configuration to transfer chats to agents who have that skill.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
LiveChatUserConfigId	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the Live Agent configuration; agents associated with this configuration can transfer chats to the chat button indicated by the `LiveChatButtonId`.
`SkillId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the skill group that agents can transfer chats to.

UserCustomBadge

Represents a custom badge for a user. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`BadgeType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of badge. Valid values are: • `Customer` • `Partner` • `Employee`
`CustomText`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Custom text for the badge.

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community or org that the badge is in.

UserCustomBadgeLocalization

Represents the translated version of a custom badge for a user. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Special Access Rules

- Translation Workbench must be enabled for your org.
- Users with the "Customize Application" or "Manage Translation" permission can create or update UserCustomBadge translations.

Fields

Field Name	Details
Language	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** The language the UserCustomBadge is translated into. This picklist contains these fully supported languages. • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi` • French: `fr` • German: `de`

Field Name	Details
	- Italian: `it` - Japanese: `ja` - Korean: `ko` - Norwegian: `no` - Portuguese (Brazil): `pt_BR` - Russian: `ru` - Spanish: `es` - Spanish (Mexico): `es_MX` - Swedish: `sv` - Thai: `th`
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: - In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. - In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the UserCustomBadge.
`Value`	**Type** string

Field Name	Details
	Properties Create, Filter, Sort, Update **Description** The translated text for the UserCustomBadge. Label is **Translation Text**.

UserDevice

Represents information unique to a device. Available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You must have View Devices enabled to see devices.

Fields

Field Name	Details
`BrowserType`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The browser used for login.
`DeviceNativeUid`	**Type** string **Properties** Filter, Group, idLookup, Nillable, Sort **Description** A unique string used to identify a mobile device.
`DeviceType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort

Field Name	Details
	Description The device used to log in to Salesforce. The picklist options are: • Desktop • Tablet • iPad • iPhone • Phone • Unknown
IsVerified	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Reserved for future use.
LastLoginHistoryId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The most recent LoginHistory associated with the device.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** This field is system-generated and cannot be changed.
PlatformType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The operating system of the device. The picklist options are: • iOS • Android • OSX • Linux

Field Name	Details
	• Phone • Windows • AppleApp • Blackberry • Other
`Status`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The activity status of the device. The picklist options are: • Active • Revoked • New
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user.
`UserLastSeen`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date and time of the user's last access.

UserDeviceApplication

Represents information on applications installed on a device that is accessing Salesforce. Available in API version 43.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You must have View Devices enabled to see devices.

Fields

Field Name	Details
ApplicationType	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The type of application used to log in to Salesforce.
Name	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** This field is system-generated and cannot be changed.
Status	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The activity status of the device application. The picklist options are: • Active • Revoked • New
UserDeviceId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The unique identifier used to identify a device when tracking events. `UserDeviceId` is a generated value that's created when the mobile app is initially run after installation.
UserId	**Type** reference

Field Name	Details
	Properties Filter, Group, Sort **Description** The ID of the user.

UserFeed

Represents a single feed item in the feed displayed on a Chatter user profile feed. A user profile feed shows changes to a user record for fields that are tracked in feeds, and posts and comments about the record. This object is available in API version 18.0 and later.

A user feed shows recent changes to a user record for any fields that are tracked in feeds, and posts and comments about the record. It is a useful way to stay up-to-date with changes made to users in the organization.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

If you use the FeedComment object to comment on a user record, the user can delete the comment. For example, if John Smith makes a comment about Sasha Jones, Sasha can delete the comment.

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the User object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of UserFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.

Field	Details
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator. The `ConnectionId` contains the ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.

Field	Details
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
CreatedDate	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
FeedPostId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.

Field	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>`

Field	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community.

Field	Details
	• AllNetworks—The feed item is available in all communities. Note the following exceptions for NetworkScope: • Only feed items with a Group or User parent can set a NetworkId or a null value for NetworkScope. • For feed items with a record parent, users can set NetworkScope only to AllNetworks. • You can't filter a FeedItem on the NetworkScope field.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the user record. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • ActivityEvent—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging).

Field	Details
	For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object • `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.

Field	Details
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to track changes for a user record.

SEE ALSO:

User
EntitySubscription
NewsFeed
UserProfileFeed

UserLicense

Represents a user license in your organization. A user license entitles a user to specific functionality and determines the profiles and permission sets available to the user.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field	Details
LicenseDefinitionKey	**Type** string **Properties** Filter, Nillable **Description** A string that uniquely identifies a particular user license. Label is `License Def. ID`. Values are: **AUL**: corresponds to the Salesforce Platform user license **AUL1**: corresponds to the Salesforce Platform One user license **AUL_LIGHT** corresponds to the Salesforce Platform Light user license **FDC_ONE** corresponds to the Lightning Platform - One App user license **FDC_SUB** corresponds to the Lightning Platform App Subscription user license **High Volume Customer Portal_User**: corresponds to the High Volume Customer Portal user license **Overage_Platform_Portal_User** corresponds to the Overage Authenticated Website user license **PID_STRATEGIC_PRM**: corresponds to the Gold Partner user license **PID_CHATTER** corresponds to the Chatter Only user license **PID_CONTENT** corresponds to the Content Only user license **PID_Customer_Portal_Basic**: corresponds to the Customer Portal Manager Standard user license and the Customer Portal User license **PID_Customer_Portal_Standard**: corresponds to the Customer Portal Manager Custom user license **PID_FDC_FREE** corresponds to the Lightning Platform Free user license **PID_IDEAS** corresponds to the Ideas Only user license **PID_Ideas_Only_Portal** corresponds to the Ideas Only Portal user license **PID_Ideas_Only_Site** corresponds to the Ideas Only Site user license **PID_KNOWLEDGE** corresponds to the Knowledge Only user license **PID_Customer_Community** corresponds to the Customer Community license. **PID_Customer_Community_Login** corresponds to the Customer Community Login license. **PID_Partner_Community** corresponds to the Partner Community license. **PID_Partner_Community_Login** corresponds to the Partner Community Login license. **PID_Limited_Customer_Portal_Basic**: corresponds to the Limited Customer Portal Manager Standard user license

Field	Details
	PID_Limited_Customer_Portal_Standard: corresponds to the Limited Customer Portal Manager Custom user license **PID_Overage_Customer_Portal_Basic**: corresponds to the Overage Customer Portal Manager Standard user license **PID_Overage_High Volume Customer Portal** corresponds to the Overage High Volume Customer Portal user license **Platform_Portal_User**: corresponds to the Authenticated Website user license **POWER_PRM**: corresponds to the Partner user license **POWER_SSP**: corresponds to the Customer Portal Manager user license **SFDC**: corresponds to the Full CRM user license
`MasterLabel`	**Type** string **Properties** Filter, Group, Sort **Description** The user license label. This field is available in API version 32.0 and later.
`MonthlyLoginsEntitlement`	**Type** int **Properties** Filter, Nillable **Description** The maximum number of customer or partner portal logins allowed per month. A `null` value in this field means the user license is charged according to the number of users rather than the number of logins. This field is available in API version 20.0 and later.
`MonthlyLoginsUsed`	**Type** int **Properties** Nillable **Description** The number of successful logins for all users associated with a customer or partner portal user license. This field has a non-`null` value if `MonthlyLoginsEntitlement` has a non-`null` value. This field is available in API version 20.0 and later.
`Name`	**Type** string

Field	Details
	Properties Filter, Group, Sort **Description** The internal name of the user license. Note: Your organization may also include custom user licenses.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The current status of the user license. Valid values for this field are `Active` and `Disabled`. This field is available in API version 32.0 and later.
`TotalLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The number of user licenses in the organization. This field is available in API version 32.0 and later.
`UsedLicenses`	**Type** int **Properties** Filter, Group, Sort **Description** The number of user licenses that are assigned to active users in the organization. This field is available in API version 32.0 and later.
UsedLicensesLastUpdated	**Type** dateTime **Properties** aggregate, Filter, Sort **Description** The timestamp of the query. If your license count exceeds your org's allotted threshold, the count timestamp reflects the previous day, otherwise the timestamp reflects the current day and time. This field is available in API version 41.0 and later.

Usage

Users with the "View Setup and Configuration" permission can use the UserLicense object to view the set of currently defined user licenses in your organization.

The UserLicense object is currently used by bulk user creation to determine the user license to which each profile and permission set belongs. For example, if you use the API to create portal users and you want to know which profile belongs to each portal user license, you can query this object for each profile and check the `LicenseDefinitionKey` to identify the associated user license.

SEE ALSO:

Profile

UserListView

Represents the customizations a user made to a list view. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Details
`LastViewedChart`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The last chart a user viewed.
`ListViewId`	**Type** ID **Properties** Create, Filter, Group, Sort **Description** The ID of the list view.
`SobjectType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The API name of the sObject for the user list view.

Name	Details
`UserId`	**Type** ID **Properties** Create, Filter, Group, Sort **Description** The ID of the user.

UserListViewCriterion

Represents the criterion for a user's customized list view. The criterion consists of the filters or sort order a user added to a list view for the Salesforce Mobile app. This object is available in API version 32.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Name	Details
`ColumnName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the column in the user list view.
`Operation`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The criteria to apply, such as "equals" or "starts with."
`SortOrder`	**Type** int **Properties** Create, Filter, Group, Sort, Update

Name	Details
	Description The order in which the list view is evaluated compared to other UserListViewCriterion objects for the given UserListView.
UserListViewId	**Type** ID **Properties** Create, Filter, Group, Sort **Description** The ID of the user list view.
Value	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The field values used to filter the list view. For example, a value of `94105` if the Field is `Billing Zip/Postal Code` shows only rows that have a billing ZIP code of 94105.

UserLogin

Represents the settings that affect a user's ability to log into an organization. To access this object, you need the `UserPermissions.ManageUsers` permission. This object is available in API version 29.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
IsFrozen	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the user account associated with this object is frozen.
IsPasswordLocked	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the user account associated with this object is locked because of too many login failures. From the API, you can set this field to `false`, but not `true`
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the associated user account. This field can't be updated.

Usage

To query for all frozen users in your organization:

```
SELECT Id, UserId
FROM UserLogin
WHERE IsFrozen = true
```

UserMembershipSharingRule

Represents the rules for sharing user records from a source group to a target group. A user record contains details about a user. Users who are members of the source group can be shared with members of the target group. The source and target groups can be based on roles, portal roles, public groups, or territories. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters. This field is available in API version 29.0 and later.

Field	Details
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
`UserAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing being allowed. The possible values are: • `Read` • `Edit`
`UserOrGroupId`	**Type** reference

Field	Details
	Properties Create, Filter, Group, Sort **Description** The ID representing the target group being given access.

Usage

Use this object to manage sharing rules for user records. Source and target groups can include internal users, portal users, Chatter or Chatter External users.

UserPackageLicense

Represents a license for an installed managed package, assigned to a specific user. This object is available in API version 31.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

Field Name	Details
`PackageLicenseId`	**Type** reference **Properties** Filter, Group, Sort **Description** The 18-character Globally Unique ID (GUID) that identifies the package license
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** The User ID of the user licensed to use this package

Usage

Use this object, in conjunction with PackageLicense, to provide users access to a managed package installed in your organization.

UserPermissionAccess

Represents the permissions accessibility for a current user. Available in API version 41.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`LastCacheUpdate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The last modified date and time of either the user info or org info, whichever is later.
`Permissions<PermissionName>`	**Type** boolean **Properties** Filter **Description** The name of the permission, such as `PermissionsActivateContract` or `PermissionsAuthorApex` and whether it's available to the user (`true`) or not (`false`).

Usage

API users without `PermissionsViewSetup` can use this object to check if their own sessions have access to a feature.

UserPreference

Represents a functional preference for a specific user in your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`Preference`	**Type** picklist **Properties** Create, Defaulted on Create, Filter, Group, Restricted picklist, Sort, Update **Description** The name of the user preference. Supported values are: • `Event Reminder Default Lead Time` • `Task Reminder Default Time` • `Prevent Logs on Load` • `Autocomplete Apex After Key Press` • `Visualforce Viewstate Inspector` • `Forecasting Displayed Type` • `Editor Theme` • `Editor Font Size` • `Pinned Folders` • `Enable Query Plan` • `Enable New Open Dialog` • `Email Transport Type` • `Pinned Wave Folders` `Event Reminder Default Lead Time` and `Task Reminder Default Time` are related to these fields on the User object: • `UserPreferencesEventRemindersCheckboxDefault` • `UserPreferencesTaskRemindersCheckboxDefault` • `UserPreferencesSuppressEventSFXReminders` • `UserPreferencesSuppressTaskSFXReminders` `Enable New Open Dialog` is reserved for future use. When creating SOQL queries, `tolabel` is required to return accurate results. For example, `select Id, tolabel(Preference), Value, UserId from UserPreference`.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user associated with this role. The corresponding field label is **User ID**. Admin users can create and edit preferences for other users.

Field	Details
	Standard users can delete their own preferences only. For a standard user, the value of the `UserId` field must be their own UserId.
`Value`	**Type** textarea **Properties** Filter, Nillable, Sort **Description** The value of the user preference. For `Event Reminder Default Lead Time`, the values are increasing intervals of time from 0 minutes to 2 days. For `Task Reminder Default Time`, the values are half-hours from 12:00 AM to 11:30 PM. To view the respective sets of values, access the Reminders in your personal settings in the online application.

Usage

Use this object to query the set of currently configured user preferences in your organization. In your client application, you can query the User object to obtain valid User IDs to access the UserPreference object.

All users can invoke the supported calls with this object. Standard users can invoke these calls, but only on their own preferences.

UserProfile

Represents a Chatter user profile.

Note: This object has been deprecated as of API version 32.0. Use the User object to query information about a user in API version 32.0 and later.

Supported Calls

`describeLayout()`, `query()`, `retrieve()`

Special Access Rules

- Information in hidden fields in a user's profile is not searchable by external users (with a portal profile) in a community. For example, if a user in a community has a hidden email address and an external user searches for it, the user record is not returned in the search results. Hidden field values are also not returned when external users perform searches on non-hidden fields. So if an external user searches for a user's name (cannot be hidden), any hidden field values associated with the user record (for example, a hidden email address) are not returned in the search results.

  Internal users from your organization who belong to the same community, however, can both search for and view hidden field values in search results.

- Any fields that have been restricted in visibility will be returned empty, whether or not they are, and will not be removed from the field listing.

Fields

Field	Details
AboutMe	**Type** textarea **Properties** Filter, Nillable, Sort **Description** Information about the user, such as areas of interest or skills.
Address (beta)	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address. Read-only. See Address Compound Fields for details on compound address fields.
City	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The city associated with the user profile.
CompanyName	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The company associated with the user profile.
Country	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The country associated with the user profile.
Email	**Type** email **Properties** Filter, Group, idLookup, Sort

Field	Details
	Description The email address associated with the user profile.
`Fax`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The fax number associated with the user profile.
`FirstName`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user's first name.
`FullPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for the user's profile photo if Chatter is enabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
`IsBadged`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort

Field	Details
	Description Indicates whether the user is visually badged (`true`) or not (`false`). Users of the same Chatter user type (internal, external) are badged. Different user types are not badged.
`LastName`	**Type** string **Properties** Filter, Group, Sort **Description** The user's last name.
`Latitude` (beta)	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Longitude` to specify the precise geolocation of an address. Acceptable values are numbers between –90 and 90 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`Longitude` (beta)	**Type** double **Properties** Filter, Nillable, Sort **Description** Used with `Latitude` to specify the precise geolocation of an address. Acceptable values are numbers between –180 and 180 up to 15 decimal places. For details on geolocation compound fields, see Compound Field Considerations and Limitations.
`ManagerId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user who manages this user.
`MobilePhone`	**Type** phone

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The user’s mobile or cellular phone number.
`Name`	**Type** string **Properties** Filter, Group, Sort **Description** Concatenation of `FirstName` and `LastName`.
`Phone`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The user’s phone number.
`PostalCode`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user’s postal or ZIP code. Label is **Zip/Postal Code**.
`SmallPhotoUrl`	**Type** url **Properties** Filter, Nillable, Sort **Description** The URL for a thumbnail of the user's profile photo if Chatter is enabled. The URL is updated every time a photo is uploaded and reflects the most recent photo. The URL returned for an older photo is not guaranteed to return a photo if a newer photo has been uploaded. You should always query this field for the URL of the most recent photo.
`State`	**Type** string

Field	Details
	Properties Filter, Group, Nillable, Sort **Description** The state associated with the user profile.
`Street`	**Type** textarea **Properties** Filter, Group, Nillable, Sort **Description** The street address associated with the user profile.
`Title`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The user's business title, such as "Vice President."
`UserPreferencesActivityRemindersPopup`	**Type** boolean **Properties** Filter **Description** When `true`, a reminder popup window automatically opens when an activity reminder is due. Corresponds to the `Trigger alert when reminder comes due` checkbox at the Reminders page in the personal settings in the user interface.
`UserPreferencesApexPagesDeveloperMode`	**Type** boolean **Properties** Filter **Description** When `true`, indicates the user has enabled developer mode for editing Visualforce pages and controllers.
`UserPreferencesDisableAllFeedsEmail`	**Type** boolean **Properties** Filter

Field	Details
	Description When `false`, the user automatically receives email for all updates to Chatter feeds, based on the types of feed emails and digests the user has enabled.
`UserPreferencesDisableBookmarkEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a Chatter feed item after the user has bookmarked it.
`UserPreferencesDisableChangeCommentEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a change the user has made, such as an update to their profile.
`UserPreferencesDisableEndorsementEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the member automatically receives email every time someone endorses them for a topic.
`UserPreferencesDisableFeedbackEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to Work.com feedback. This includes when someone requests or offers feedback, shares feedback with the user, or reminds the user to answer a feedback request.
`UserPreferencesDisableFileShareNotificationsForApi`	**Type** boolean

Field	Details
	Properties Filter **Description** When `false`, email notifications are sent from the person who has shared a file to the users with whom the file has been shared.
`UserPreferencesDisableFollowersEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone starts following the user in Chatter.
`UserPreferencesDisableLaterCommentEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a feed item after the user has commented on the feed item.
`UserPreferencesDisableLikeEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone likes a post or comment the user has made.
`UserPreferencesDisableMentionsPostEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time the user is mentioned in posts.
`UserPreferencesDisableMessageEmail`	**Type** boolean

Field	Details
	Properties Filter **Description** When `false`, the user automatically receives email for Chatter messages sent to the user.
`UserPreferencesDisableProfilePostEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone posts to the user's profile.
`UserPreferencesDisableRewardEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives emails related to Work.com rewards. This includes when someone someone gives a reward to the user.
`UserPreferencesDisableSharePostEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time the user's post is shared.
`UserPreferencesDisableWorkEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user receives emails related to Work.com feedback, goals, and coaching. The user must also sign up for individual emails listed on the Work.com email settings page. When `true`, the user will not receive any emails related to Work.com feedback, goals, or coaching even if they are signed up for individual emails.

Field	Details
`UserPreferencesDisCommentAfterLikeEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on a post the user has liked.
`UserPreferencesDisMentionsCommentEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time the user is mentioned in comments.
`UserPreferencesDisProfPostCommentEmail`	**Type** boolean **Properties** Filter **Description** When `false`, the user automatically receives email every time someone comments on posts on the user's profile.
`UserPreferencesEnableAutoSubForFeeds`	**Type** boolean **Properties** Filter **Description** When `true`, the user automatically subscribes to feeds for any objects that the user creates.
`UserPreferencesEventRemindersCheckboxDefault`	**Type** boolean **Properties** Filter **Description** When `true`, a reminder popup is automatically set on the user's events. Corresponds to the `By default, set reminder on Events to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.

Field	Details
UserPreferencesHideChatterOnboardingSplash	**Type** boolean **Properties** Filter **Description** When `true`, the initial Chatter onboarding prompts do not appear.
UserPreferencesHideCSNDesktopTask	**Type** boolean **Properties** Filter **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Desktop.
UserPreferencesHideCSNGetChatterMobileTask	**Type** boolean **Properties** Filter **Description** When `true`, the Chatter recommendations panel never displays the recommendation to install Chatter Mobile.
UserPreferencesHideS1BrowserUI	**Type** boolean **Properties** Filter **Description** Controls the interface that the user sees when logging in to Salesforce from a supported mobile browser. If `false`, the user is automatically redirected to the Salesforce mobile web. If `true`, the user sees the full Salesforce site. The default value is `false`. Label is **Salesforce User**. This field is available in API version 29.0 or later.
UserPreferencesHideSecondChatterOnboardingSplash	**Type** boolean **Properties** Filter **Description** When `true`, the secondary Chatter onboarding prompts do not appear.

Field	Details
UserPreferencesReminderSoundOff	**Type** boolean **Properties** Filter **Description** When `true`, a sound automatically plays when an activity reminder is due. Corresponds to the `Play a reminder sound` checkbox on the Reminders page in the user interface.
UserPreferencesShowCityToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the city field in the user's contact information. City is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. City is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCityToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowCityToGuestUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the city field in the user's contact information. When `true`, city is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCityToExternalUsers`, making the user's city visible to external members.

Field	Details
	The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowCountryToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the country field in the user's contact information. Country is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Country is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowCountryToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowCountryToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the country field in the user's contact information. When `true`, country is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowCountryToExternalUsers`, making the user's country visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowEmailToExternalUsers`	**Type** boolean

Field	Details
	Properties Filter **Description** Indicates the visibility of the email address field in the user's contact information. Email address is visible only to internal members of the user's organization when this field is `false`. Email address is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowFaxToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the fax number field in the user's contact information. Fax number is visible only to internal members of the user's organization when this field is `false`. Fax number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowManagerToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the manager field in the user's contact information. Manager is visible only to internal members of the user's organization when this field is `false`. Manager is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowMobilePhoneToExternalUsers`	**Type** boolean **Properties** Filter

Field	Details
	Description Indicates the visibility of the mobile or cellular phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowPostalCodeToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. Postal code is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Postal code is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowPostalCodeToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowPostalCodeToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the postal or ZIP code field in the user's contact information. When `true`, postal code is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`.

Field	Details
	When `true`, this field overrides the value `false` in `UserPreferencesShowPostalCodeToExternalUsers`, making the user's postal code visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowProfilePicToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the user's profile photo. When `true`, the photo is visible to guest users in a community. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the stock photo. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowStateToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the state field in the user's contact information. State is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. State is visible to external members in a community when: • This field is `true`, or • This field is `false` but `UserPreferencesShowStateToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesShowStateToGuestUsers`	**Type** boolean

Field	Details
	Properties Filter **Description** Indicates the visibility of the state field in the user's contact information. When `true`, state is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowStateToExternalUsers`, making the user's state visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
UserPreferencesShowStreetAddressToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the street address field in the user's contact information. The address is visible only to internal members of the user's organization when this field is `false`. The address is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
UserPreferencesShowTitleToExternalUsers	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the business title field in the user's contact information. Title is visible only to internal members of the user's organization when: • This field is `false`. When `false`, this field returns the value `#N/A`. Title is visible to external members in a community when: • This field is `true`, or

Field	Details
	• This field is `false` but `UserPreferencesShowTitleToGuestUsers` is `true`, which overrides this field's value. External users are users with Community, Customer Portal, or partner portal licenses. The default value is `true`. This field is available in API version 26.0 and later.
`UserPreferencesShowTitleToGuestUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the business title field in the user's contact information. When `true`, title is visible to guest users. Guest users can access public Site.com and Salesforce sites, and public pages in Communities, via the Guest User license associated with each site or community. When `false`, this field returns the value `#N/A`. When `true`, this field overrides the value `false` in `UserPreferencesShowTitleToExternalUsers`, making the user's title visible to external members. The default value is `false`. This field is available in API version 28.0 and later.
`UserPreferencesShowWorkPhoneToExternalUsers`	**Type** boolean **Properties** Filter **Description** Indicates the visibility of the work phone number field in the user's contact information. The number is visible only to internal members of the user's organization when this field is `false`. The number is visible to external members in a community when this field is `true`. External users are users with Community, Customer Portal, or partner portal licenses. When `false`, this field returns the value `#N/A`. The default value is `false`. This field is available in API version 26.0 and later.
`UserPreferencesTaskRemindersCheckboxDefault`	**Type** boolean **Properties** Filter

Field	Details
	Description When `true`, a reminder popup is automatically set on the user's tasks. Corresponds to the `By default, set reminder on Tasks to...` checkbox on the Reminders page in the user interface. This field is related to UserPreference and customizing activity reminders.

Usage

Use this object to query Chatter—related information about the user. While the User object contains all the information about a user and is historically tied to user management, UserProfile is a read-only entity that contains the information that is relevant in a Chatter context.

UserProfileFeed

Represents a user profile feed, which tracks all actions by a user on records that can be tracked in a feed. This feed is displayed on the user profile page.

UserProfileFeed is available in API version 18.0 through API 26.0. In API version 27.0 and later, UserProfileFeed is no longer available in the SOAP API. Use the Chatter REST API to access UserProfileFeed.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Moderate Chatter"

  Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

- "Manage Unlisted Groups"

  Only users with this permission can delete items in unlisted groups.

Fields

Field	Details
`Body`	**Type** textarea

Field	Details
	Properties Nillable, Sort **Description** The content of UserProfileFeed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item. Tip: In a feed that supports pre-moderation, `CommentCount` isn't updated until a comment is published. For example, say that you comment on a post that already has one published comment and your comment triggers moderation. Now there are two comments on the post, but the count says there's only one. In a moderated feed, your comment isn't counted until it's approved by an admin or a person with "CanApproveFeedPostAndComment" or "ModifyAllData" permission. Feed moderation has implications on how you retrieve feed comments. In a moderated feed, rather than retrieving comments by looping through `CommentCount`, go through pagination until end of comments is returned.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort

Field	Details
	Description This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The size of the file (in bytes) uploaded to the feed. This field is read-only and is automatically determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The MIME type of the file uploaded to the feed. This field is read-only and is automatically determined during insert.
`CreatedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when this record was created. This field is a standard system field. Ordering by `CreatedDateDESC` sorts the feed by the most recent feed item.
`FeedPostId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** This field was removed in API version 22.0, and is available in earlier versions for backward compatibility only. ID of the associated FeedPost. A FeedPost represents the following types of changes in an FeedItem: changes to tracked fields, text posts, link posts, and content posts.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort

Field	Details
	Description ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the `InsertedBy` value is set to the ID of the logged-in user.
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Standard system field. Indicates whether the record has been moved to the Recycle Bin (`true`) or not (`false`).
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** Date and time when a user last modified this record. This field is a standard system field. When a feed item is created, `LastModifiedDate` is the same as `CreatedDate`. If a FeedComment is inserted on that feed item, then `LastModifiedDate` becomes the `CreatedDate` for that FeedComment. Deleting the FeedComment does not change the `LastModifiedDate`. Ordering by `LastModifiedDate DESC` sorts the feed by both the most recent feed item or comment.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
`NetworkScope`	**Type** picklist

Field	Details
	Properties Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the account record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the user profile record. When the `Type` is `LinkPost`, the `LinkUrl` is the URL and this field is the link name.

Field	Details
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item: • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `CaseCommentPost`—generated event when a user adds a case comment for a case object

Field	Details
	• `EmailMessageEvent`—generated event when an email related to a case object is sent or received • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `ChangeStatusPost`—generated event when a user changes the status of a case • `AttachArticleEvent`—generated event when a user attaches an article to a case Note: If you set `Type` to `ContentPost`, also specify `ContentData` and `ContentFileName`.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available to all users or internal users only. This field is available in API version 26.0 and later, if Salesforce Communities is enabled for your organization. `Visibility` can have the following values: • `AllUsers`—The feed item is available to all users who have permission to see the feed item. • `InternalUsers`—The feed item is available to internal users only. Note the following exceptions for `Visibility`: • For record posts, `Visibility` is set to `InternalUsers` for all internal users by default. • External users can set `Visibility` only to `AllUsers`. • On user and group posts, only internal users can set `Visibility` to `InternalUsers`.

Usage

Use this object to query and retrieve record changes tracked in a user profile feed. Note the following when working with user profile feeds:

- This object is read only in the API.
- Queries retrieve feed items that include mentions from other users.
- Use this object to query and retrieve lead feed items that were associated with a converted lead record.
- Include a `WITH` clause and specify the `UserId` of the user whose profile you want to query. The `WITH` clause must come after a `WHERE` clause.

Users that do not have the "View All Data" permission have the following limitations when querying records:

- Must specify a `LIMIT` clause and the limit must be less than or equal to 1000.

- Can include a `WHERE` clause that references UserProfileFeed fields, but cannot include references to fields in related objects. For example, you can filter by `CreatedDate` or `ParentId`, but not by `Parent.Name`.
- Can include an `ORDER BY` clause that references UserProfileFeed fields, but cannot include references to fields in related objects. For example, you can `ORDER BY CreatedDate` or `ParentId`, but not by `Parent.Name`.

Tip: To query for the most recent feed items, you should `ORDER BY CreatedDate DESC, Id DESC`.

Note the following SOQL restrictions.

- No SOQL limit if logged-in user has "View All Data" permission. If not, specify a LIMIT clause of 1,000 records or fewer.
- SOQL ORDER BY on fields using relationships is not available. Use ORDER BY on fields on the root object in the SOQL query.

SEE ALSO:

EntitySubscription
FeedComment
FeedTrackedChange

UserProvAccount

Represents information that links a Salesforce user account with an account in a third-party (target) system, such as Google, for users of connected apps with Salesforce user provisioning enabled. This object is available in API version 33.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 15 character application ID.
`DeletedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date and time when the associated user account in the target system was deleted. This value is automatically updated during the provisioning and reconciling processes.

Field	Details
ExternalEmail	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address as stored in the target system for the associated user account.
ExternalFirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
ExternalLastName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.
IsKnownLink	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Setting the `IsKnownLink` value to `true` implies the administrator or another user is managing the relationship between the Salesforce user account and the third-party user account, manually. This field helps Salesforce coordinate updates between the UserProvAccountStaging object and the UserProvAccount object while committing staged accounts. Typically, for a matching user account (the same `ExternalUserId` for both objects), Salesforce copies the values from the UserProvAccountStaging object to the UserProvAccount object. However, if Salesforce encounters a UserProvAccountStaging object with a matching `ExternalUserId` but different `LinkState` and `SalesforceUserId` values during this process, Salesforce checks the UserProvAccount `IsKnownLink` value. If the `IsKnownLink`value is `true`, Salesforce doesn't copy the `LinkState` and `SalesforceUserId` values from the UserProvAccountStaging object to the UserProvAccount object (all other values are copied). The default is `false`, meaning Salesforce manages the account relationship.
`LinkState`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The state of the current connection between the user account in the Salesforce organization and the associated user account in the target system. The valid values are: • `linked`— changes to the account in the Salesforce organization are queued to be updated for the associated user account in the target system. • `duplicate`— an associated account in the target system exists. • `orphaned`—no associated account exists in the target system. • `ignored`— changes to the account in the Salesforce organization have no effect on the associated user account in the target system.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Namepointing, Sort, Update

Field	Details
	Description The user ID of the owner of this object—typically a Salesforce administrator.
`SalesforceUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user ID for the user account in the Salesforce organization that is associated with the user account in the target system.
`Status`	**Type** picklist **Properties** Create, Filter, Group, Sort, Update **Description** The status of the account in the target system. The valid values are: • `Active` • `Deactivated` • `Deleted`

UserProvAccountStaging

Temporarily stores user account information while a user completes the User Provisioning Wizard. This information that is stored in the UserProvAccount object when you click the button to collect and analyze accounts on the target system.

User provisioning links a Salesforce user account with an account in a third-party (target) system. To configure user provisioning, you use a User Provisioning Wizard that guides you through the setup process. As you enter values about account details in the wizard, these values are stored in this object until you click the button to collect and analyze accounts on the target system. The general user provisioning configuration details are stored in the UserProvisioningConfig object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ConnectedAppId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The 15 character connected app ID.
ExternalEmail	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The email address as stored in the target system for the associated user account.
ExternalFirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
ExternalLastName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.

Field Name	Details
LinkState	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The state of the current connection between the user account in the Salesforce organization and the associated user account in the target system. The valid values are: • `linked`— a user account matches one in the target system. • `duplicate`— an associated account in the target system exists. • `orphaned`—no associated account exists in the target system. • `ignored`— changes to the account in the Salesforce organization have no effect on the associated user account in the target system.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user ID of the owner of this object—typically a Salesforce administrator.
SalesforceUserId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The user ID for the user account in the Salesforce organization that is associated with the user account in the target system.
Status	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The status of the account in the target system. The valid values are: • `Active` • `Deactivated` • `Deleted`

Usage

When committing fields from a UserProvAccountStaging to a UserProvAccount object, Salesforce looks up the UserProvAccount record where `UserProvAccountStaging.ExternalUserId = UserProvAccount.ExternalUserId`.

- If an `ExternalUserId` doesn't match an existing account, Salesforce creates a UserProvAccount record based on the UserProvAccountStaging record.
- If an `ExternalUserId` matches, then Salesforce checks the `UserProvAccount.isKnownLink` value, and does the following.
  - If `UserProvAccount.IsKnownLink = true`, Salesforce copies the UserProvAccountStaging values to the UserProvAccount object, except for the `ExternalUserId` and `LinkState` values.
  - If `UserProvAccount.IsKnownLink = false`, Salesforce copies all of the UserProvAccountStaging values to the UserProvAccount object.

UserProvMockTarget

Represents an entity for testing user data before committing the data to a third-party system for user provisioning.

During the user provisioning process, user account information is sent to a third-party system to create, update or delete a user account on that system. While configuring user provisioning for your organization using a flow or Apex plugin, you can use this object to confirm the associated flow or plugin is sending the desired data. After confirming the correct fields and values, you can update the flow or Apex plugin to send the data to the target system.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ExternalEmail`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The email address as stored in the target system for the associated user account.
ExternalFirstName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The first name as stored in the target system for the associated user account.
ExternalLastName	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The last name as stored in the target system for the associated user account.
ExternalUserId	**Type** string **Properties** Create, Filter, Group, idLookup, Nillable, Sort, Update **Description** The unique identifier for the user as stored in the target system.
ExternalUsername	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username as stored in the target system for the associated user account.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The unique name for this object.
OwnerId	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** The user ID of the owner of this object—typically a Salesforce administrator.

UserProvisioningConfig

Represents information for a flow to use during a user provisioning request process, such as the attributes for an update. This object is available in API version 34.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`ApprovalRequired`	**Type** textarea **Properties** Create, Nillable, Update **Description** Denotes whether approvals are required for provisioning users for the associated connected app. If the value is null, no approval is required.
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 18-digit application ID for the connected app.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with

Field Name	Details
	a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package, and the changes are reflected in a subscriber's organization.
Enabled	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether user provisioning is enabled for the associated connected app (`true`) or not (`false`).
EnabledOperations	**Type** textarea **Properties** Create, Nillable, Update **Description** Lists the operations, as comma-separated values, that create a UserProvisioningRequest object for the associated connected app. Allowed values are: • `Create` • `Update` • `EnableAndDisable` (activation and deactivation) • `SuspendAndRestore` (freeze and unfreeze)
Language	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The two- to five-character code that represents the language and locale ISO. This code controls the language for labels displayed in an application.
LastReconDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description The date and time when user accounts were last reconciled between Salesforce and the target system.
MasterLabel	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The master label for this object. This value is the internal label that doesn't get translated.
NamedCredentialId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the named credential that's used for a request. The named credential identifies the third-party system and the third-party authentication settings.
NamespacePrefix	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***namespacePrefix__componentName*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.

Field Name	Details
`Notes`	**Type** textarea **Properties** Create, Nillable, Update **Description** A utility field for administrators to add any additional information about the configuration. This field is for internal reference only, and is not used by any process.
`OnUpdateAttributes`	**Type** textarea **Properties** Create, Nillable, Update **Description** Lists the user attributes, as comma-separated values, that generate a UserProvisioningRequest object during an update.
`ReconFilter`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** When collecting and analyzing users on a third-party system, the plug-in uses this filter to limit the scope of the collection.
`UserAccountMapping`	**Type** textarea **Properties** Create, Nillable, Update **Description** Stores the attributes used to link the Salesforce user to the account on the third-party system, in JSON format. For example: `{"linkingSalesforceUserAttribute":"Username", "linkingTargetUserAttribute":"Email"}`

UserProvisioningLog

Represents messages generated during the process of provisioning users for third-party applications. This object is available in API version 33.0 and later.

Some messages for this object are generated automatically by Salesforce, and others are created by the developers of the user provisioning plugin. Developers can use this object to log messages from the flow associated with the user provisioning process or the Apex plugin that calls the target system. Administrators can use this object as a log of all user provisioning activity and as a troubleshooting tool if desired behavior is missing. This object is available as a custom report type.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`Details`	**Type** textarea **Properties** Create, Nillable, Update **Description** The value of this field depends on the log entry. For example, if the target system returns an error, the error message may be recorded in this field.
`ExternalUserId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique identifier for the user in the target system.
`ExternalUsername`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The username set in the target system for the associated user account.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field	Details
	Description The unique name for this object.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce ID of the Group or User who owns this object.
`Status`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The status of the user provisioning request. Based on the context of the log, it can contain different values, such as an HttpStatusCode.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user making the request.
`UserProvisioningRequestId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A unique identifier for the user provisioning request.

UserProvisioningRequest

Represents an individual provisioning request to create, update, or delete a single user account in a third-party service system (or another Salesforce organization). This object is available in API version 33.0 and later.

A UserProvisioningRequest (UPR) record is created for each provisioning action for each user, and for each connected app available to the user. For example, if a user has two connected apps, and a provisioning request is sent to two different services to create an account for the user, Salesforce creates two UPR objects. Provisioning actions include creating, updating, or deleting a user account.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field	Details
`AppName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the connected app associated with the service provider.
`ApprovalStatus`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The status of the approval for the current request. If the user provisioning setup for the connected app does not have an approval process enabled, the status is `Not Required`. If an approval process is enabled, supported values are: • `Required`— An approval process is enabled in the user provisioning setup for the associated connected app, but there is no response to the request yet. • `Not Required`— An approval process is not enabled in the user provisioning setup for the associated connected app. • `Approved` • `Denied`
`ConnectedAppId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The 18-digit application ID for the connected app.
`ExternalUserId`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique identifier for the user in the target system.

Field	Details
ManagerId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user who manages the user specified in the `SalesforceUserId` field. If an approval process is configured for the user provisioning request. this value allows the manager to approve the request. Available in API version 34.0 and later.
Name	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The unique name for this object.
Operation	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The Apex method called by the trigger associated with the provisioning request (typically a change to the User object). Supported values are: • `Create` • `Read` • `Update` • `Deactivate` • `Activate` • `Freeze` • `Unfreeze` • `Reconcile` • `Linking` For example, when the User object field `isActive` is set to `false`, the UPR object `Operation` field value is set to `Deactivate`.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field	Details
	Description Salesforce ID of the Group or User who owns this object.
ParentID	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** When a retry event is created, the failed UPR is cloned and resubmitted. This field contains a lookup to the failed UPR that was cloned to create the current record.
Retry Count	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** Number of retry attempts performed on a UPR. Retry Count enables custom business logic such as "Retry 5 times then stop and notify your admin."
`SalesforceUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce ID of the user making the request.
`ScheduleDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** When to send this request to the service provider. Note: Scheduling is not implemented yet. Currently, provisioning changes are queued immediately to be sent to the service provider.
`State`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Status of this request. Supported values are:

Field	Details
	• `New` • `Requested` • `Completed` • `Failed` • `Collecting` • `Collected` • `Analyzing` • `Analyzed` • `Committing` • `Retried` • `Manually Completed` The `State` goes from `New` to `Requested` to `Completed` or `Failed`, unless a reconciliation process is occurring. For details about the reconciliation process `State` value changes, see Usage. The `State` goes from `Failed` to `Retried` or `Manually Completed` when troubleshooting UPR failures. For details about handling failures, see State Values for Managing Provisioning Failures.
`UserProvAccountId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID value of the associated UserProvAccount object.
`UserProvConfigId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID value of the associated UserProvisioningConfig object. Available in API version 34.0 and later.

Usage

The `State` value changes during a reconciliation process (`Operation = Reconcile`) to gather and compare users on the third-party system to Salesforce users. Typically, when a UPR entry is first created, it has a `State` value of `New`. When a collection process is triggered, the `State` transitions to `Collecting` until that process is finished and the `State` is `Collected`. When an analyze process is triggered, the `State` transitions to `Analyzing` until that process is finished and the `State` is `Analyzed`. If a process commits the request, the `State` then transitions to `Committing`, and the properties move from the

UserProvAccountStaging object to the UserProvAccount object. When those properties are saved in the UserProvAccount object, the `State` transitions to `Completed`.

However, the `State` does not necessarily start at `New`. For example, UserProvAccountStaging entries can be inserted programmatically. If a process is initiated that triggers linking these rows to accounts on the third-party service, a UPR entry could start with the `Analyzing State`.

Also, the `State` cannot go backwards from an active task. For example, a successful `Analyzing State` must progress to `Analyzed`; unless the active process fails, and then the `State` must change to `Failed`. Certain `State` transitions cannot be made programmatically and must be triggered by Salesforce.

The following table shows the `State` transitions that can occur for each `State` value. Each row corresponds to a current `State` value and each column corresponds to a new `State` after a potential transition.

- ✗ — the transition to this value is not allowed.
- ✓ — the transition to this value is allowed.
- Salesforce — only Salesforce can transition the `State` to this value.

	`New`	`Requested`	`Collecting`	`Collected`	`Analyzing`	`Analyzed`	`Committing`	`Completed`	`Failed`	`Retried`	`Manually Completed`
`New`	✓	Salesforce	✓	✓	✓	✓	✓	✓	✓	✗	✗
`Requested`	✗	✓	Salesforce	Salesforce	Salesforce	Salesforce	Salesforce	Salesforce	Salesforce	✗	✗
`Collecting`	✗	✗	✓	Salesforce	Salesforce	Salesforce	Salesforce	Salesforce	Salesforce	✗	✗
`Collected`	✗	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗
`Analyzing`	✗	✗	✗	Salesforce	✓	Salesforce	Salesforce	Salesforce	Salesforce	✗	✗
`Analyzed`	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗
`Committing`	✗	✗	✗	✗	✗	Salesforce	✓	Salesforce	Salesforce	✗	✗
`Completed`	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
`Failed`	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
`Retried`	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
`Manually Completed`	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

State Values for Managing Provisioning Failures

The `state` value changes to `Failed` for several reasons, such as network outages, session timeouts, permissions issues, and record locks. The `Failed` state can transition to either `Retried` or `Manually Completed` to indicate what action was taken to address the failure. Actions can include correcting the root cause of the failure and requesting that the provisioning engine retry the UPR. Or, it can be completing the action against the target manually. Each UPR is an independent transaction and it's possible the retry causes a failure with a different root cause. So it's hard to distinguish failed events that you addressed from the ones that require more action.

If you tried to correct the cause of the failure and requested the provisioning engine to retry the UPR, you can mark the failed UPR `Retried`. Or, if the action against the target was completed manually, you can mark it `Manually Completed`.

When a retry event is created, the failed UPR is cloned, and resubmitted. The `ParentID` field contains a lookup to the failed UPR to use to clone the new UPR. The `Retry Count` field contains the number of retry attempts that were performed on a UPR. With the `Retry Count` field, you can add custom business logic like "Retry 5 times then stop and notify your admin."

UserProvisioningRequestOwnerSharingRule

Represents a rule for sharing a UserProvisioningRequest object with users other than the owner. This object is available in API version 34.0 and later.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • `Read` • `Edit`
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two

Field Name	Details
	consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. UserProvisioningRequest objects owned by users in the source group trigger the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** in the user interface.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the target user or group. Target users or groups have access to the UserProvisioningRequest object.

SEE ALSO:

Metadata API Developer Guide: SharingRules

UserProvisioningRequestShare

Represents a sharing entry on a UserProvisioningRequest record. This object is available in API version 34.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of sharing allowed. The possible values are: • `Read` • `Edit`
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent record, if any.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Values may include: • `Manual`—The User or Group has access because a user with "All" access manually shared the UserProvisioningRequest record with them. • `Owner`—The User is the owner of the UserProvisioningRequest record or is in a role above the UserProvisioningRequest record owner in the role hierarchy.
`UserOrGroupId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the UserProvisioningRequest record.

UserRecordAccess

Represents a user's access to a set of records. This object is read only and is available in API version 24.0 and later.

Supported Calls

`describeSObjects()`, `query()`

Fields

Field	Details
`HasAllAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user can share the record.
`HasDeleteAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has delete access to the record (`true`) or not (`false`).
`HasEditAccess`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has edit access to the record (`true`) or not (`false`).

Field	Details
HasTransferAccess	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has transfer access to the record (`true`) or not (`false`).
HasReadAccess	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether a user has read access to the record (`true`) or not (`false`).
MaxAccessLevel	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Indicates a user's maximum level of access to a record. Valid values are: • `None` • `Read` • `Edit` • `Delete` • `Transfer` • `All`
RecordId	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** ID of the record.
UserId	**Type** reference **Properties** Filter, Group

Field	Details
	Description ID of the user.

Usage

Use this object to query a user's access to records. You can't create, delete, or update any records using this object.

Up to 200 record IDs can be queried. You can include an `ORDER BY` clause for any field that is being selected in the query.

The following sample query returns the records, whether the queried user has read and transfer access to each record, and the user's maximum access level to each record.

```
SELECT RecordId, HasReadAccess, HasTransferAccess, MaxAccessLevel
     FROM UserRecordAccess
     WHERE UserId = [single ID]
     AND RecordId = [single ID]      //or Record IN [list of IDs]
```

The following query returns the records to which a queried user has read access.

```
SELECT RecordId
     FROM UserRecordAccess
     WHERE UserId = [single ID]
     AND RecordId = [single ID]      //or Record IN [list of IDs]
     AND HasReadAccess = true
```

Using API version 30.0 and later, UserRecordAccess is a foreign key on the records. You can't filter by or provide the `UserId` or `RecordId` fields when using this object as a lookup or foreign key. The previous sample queries can be run as:

```
SELECT Id, Name, UserRecordAccess.HasReadAccess, UserRecordAccess.HasTransferAccess,
UserRecordAccess.MaxAccessLevel
      FROM Account
```

```
SELECT Id, Name, UserRecordAccess.HasReadAccess
      FROM Account
```

SOQL restrictions:

- When the running user is querying a user's access to a set of records, records that the running user does not have read access to are filtered out of the results.
- When filtering by `UserId` and `RecordId` only, you must use `SELECT RecordId` and optionally one or more of the access level fields:`HasReadAccess`, `HasEditAccess`, `HasDeleteAccess`, `HasTransferAccess`, and `HasAllAccess`. You may include `MaxAccessLevel`.
- When filtering by `UserId`, `RecordId`, and an access level field, you must use `SELECT RecordId` only.

UserRole

Represents a user role in your organization.

Note: This object was called "Role" in previous versions of the API documentation.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

Field	Details
`CaseAccessForAccountOwner`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The case access level for the account owner.
`ContactAccessForAccountOwner`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The contact access level for the account owner. Note: When `DefaultContactAccess` is set to `Controlled by Parent`, you can't create or update this field.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Role Name** in the user interface. This field is available in API version 24.0 and later.

Field	Details
	Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`ForecastUserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the forecast manager associated with this role. Label is **User ID**.
`IsPartner`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user role is a partner who has access to the partner portal (`true`) or not (`false`). This field is not available for release 9.0 and later. Instead, use `PortalType` with the value `Partner`.
`MayForecastManagerShare`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the forecast manager can manually share their own forecast.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name of the role. Corresponds to **Label** on the user interface.
`OpportunityAccessForAccountOwner`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field	Details
	Description Required. The opportunity access level for the account owner. Note that you can't set a user role with an opportunity access less than that specified in organization-wide defaults.
ParentRoleId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the parent role.
PortalRole	**Type** picklist **Properties** Filter, Nillable **Description** The portal role: Executive, Manager, User, or PersonAccount.
PortalType	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** This value indicates the type of portal for the role: • None: Salesforce application role. • CustomerPortal: Customer portal role. • Partner: partner portal role. The field `IsPartner` used in release 8.0 will map to this value. This field replaces `IsPartner` beginning with release 9.0.
RollupDescription	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Description of the forecast rollup. Label is **Description**.

Usage

Use this object to query the set of currently configured user roles in your organization. Use it in your client application to obtain valid UserRole IDs to use when querying or modifying a User record.

Users with the View Roles and Role Hierarchy permission can query or describe this object. If your client application logs in with the "Manage Users" permission, it can query, create, update, or delete UserRole records.

Note: You can't update any field for a portal role.

For example, the following code finds all roles that are not assigned to any users.

```
SELECT Id, Name, DeveloperName
FROM UserRole
WHERE Id NOT IN (SELECT UserRoleId
                 FROM User
                 WHERE UserRoleId !='000000000000000')
```

SEE ALSO:

Object Basics

UserServicePresence

Represents a presence user's real-time presence status. This object is available in API version 32.0 and later.

Supported Calls

`delete()`, `query()`, `getDeleted()`, `getUpdated()`, `retrieve()`, `undelete()`

Fields

Field	Details
`ConfiguredCapacity`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The user's total configured capacity.
`IsAway`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user's status is `Away`.

Field	Details
Name	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** An automatically generated ID number that identifies the record.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the owner of the `UserServicePresence` entity. For external routing, allows the entity to be used in the Streaming API to listen to events whenever a `UserServicePresence` record is created, modified, or deleted.
ServicePresenceStatusId	**Type** reference **Properties** Create, Filter, Nillable, Sort, Update **Description** The ID of the presence status that's associated with the presence user that's specified by the `UserId`.
UserId	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the Omni-Channel user.

Usage

Apex triggers aren't supported with `UserServicePresence`.

Sharing rules aren't supported with `UserServicePresence` even if the `OwnerId` field is enabled.

In API version 41.0 or later, `UserServicePresence` records can be deleted programmatically. The "Customize Application" permission is required.

UserShare

Represents a sharing entry on a user record. This object is available in API version 26.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Customer Portal users can't access this object.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Read-only. Indicates whether the User has access to log in (`true`) or not (`false`). You can modify a User's active status from the user interface or via the API.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can only write to this field when its value is either omitted or set to `Manual` (default). You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Possible values include: • `Manual`—The User or Group has access to the user record because a User with "All" access manually shared the User with them. • `Rule`—The User or Group has access to the user record via a User sharing rule.
`UserAccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the User or Group has to the specified user. The specified user is denoted by the `UserId`. The possible values are:

Field	Details
	• `Read` • `Edit` This field must be set to an access level that is at least equal to the organization's default `UserAccessLevel`. `UserAccessLevel` can be updated only if `RowCause` is set to `Manual Sharing`.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User being shared.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the User or Group that has been given access to the User. This field can't be updated.

Usage

This object allows you to determine which users and groups can view or edit User records owned by other users.

UserTeamMember

Represents a single User on the default opportunity team of another User.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- This object is available only in organizations that have enabled the team selling functionality.
- Customer Portal users can't access this object.

Fields

Field	Details
OpportunityAccessLevel	**Type** picklist **Properties** Create, Filter, Restricted picklist, Update **Description** Required. Level of access that the team member has to opportunities for which the user has added his or her default opportunity team. The possible values are: • Read • Edit This field must be set to an access level that is higher than the organization's default access level for opportunities.
OwnerId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who owns the default opportunity team. This field can't be updated.
TeamMemberRole	**Type** picklist **Properties** Create, Filter, Nillable, Update **Description** Role that the team member has on opportunities for which the User has added his or her default opportunity team. The valid values are set by the organization's administrator in the Opportunity Team Roles picklist. Label is **Team Role**.
UserId	**Type** reference **Properties** Create, Filter **Description** Required. ID of the User who is a member of the default opportunity team. This field can't be updated.

Usage

If you attempt to create a record that matches an existing record, the create request updates any modified fields and returns the existing record.

Users can set up their default opportunity team to include other users that typically work with them on opportunities.

SEE ALSO:

OpportunityTeamMember

UserTerritory

Represents a User who has been assigned to a Territory.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

- Only available if territory management has been enabled for your organization.
- Customer Portal users can't access this object.

Fields

Field	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the user is active in the given territory (`true`), or inactive in the given territory (`false`): • Users who are active in a territory are explicitly assigned to the territory and can have open opportunities, closed opportunities, or no opportunities associated with that territory. • Users who are inactive in a territory are not explicitly assigned to the territory, but own an open or closed opportunity that is associated with the territory. For example, a user may have been transferred out of a territory, but still own opportunities in his or her old territory. Until a user is deleted from a territory (not simply removed from the territory), the record is not returned in a `getDeleted()` call.

Field	Details
IsDeleted	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (`true`) or not (`false`). Label is **Deleted**.
TerritoryId	**Type** reference **Properties** Create, Filter **Description** ID of the Territory to which the user has been assigned. This field is required when creating a record in API version 20.0 and later.
UserId	**Type** reference **Properties** Create, Filter **Description** ID of the user. This field is required when creating a record.

Usage

If a user is inactive in a territory, and the opportunities they own that are associated with the territory are all closed, the user is not returned in the Territories related list on the User page in Setup. Regardless of whether the user is inactive or the opportunities are closed, the user is returned in the Quotas related list.

SEE ALSO:

Territory

AccountTerritoryAssignmentRule

AccountTerritoryAssignmentRuleItem

UserTerritory2Association

Represents an association (by assignment) between a territory and a user record. Available only if Enterprise Territory Management has been enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

If a territory model is in `Active` state, any user can view that model, including its territories and assignment rules. For territories in an active model, any user can view assigned records and assigned users subject to your organization's sharing settings. Users cannot view territory models in other states (such as `Planning` or `Archived`).

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the user is active (`true`) or inactive (`false`) in the given territory.
`RoleInTerritory2`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The role of the user in a territory. Possible values are: Owner, Administrator, Sales Rep. Label is `Role in Territory`.
`Territory2Id`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the territory that the user is assigned to.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user who is assigned to the territory.

VerificationHistory

Represents the past six months of your org users' attempts to verify their identity. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Only users with "Manage Users" permission can access this object.

Fields

Field Name	Details
`Activity`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The action the user attempted that requires identity verification. The label is User Activity. Available values are: • AccessReports—The user attempted to access reports or dashboards. • Apex—The user attempted to access a Salesforce resource with a verification Apex method. • ChangeEmail—The user attempted to change an email address. • ConnectToopher—The user attempted to connect Salesforce Authenticator. • ConnectTotp—The user attempted to connect a one-time password generator. • ConnectU2F—The user attempted to register a U2F security key. • ConnectedApp—The user attempted to access a connected app. • EnableLL—The user attempted to enroll in Lightning Login. • ExportPrintReports—The user attempted to export or print reports or dashboards. • ExtraVerification—Reserved for future use. • Login—The user attempted to log in. • Registration—Reserved for future use. • TempCode—The user attempted to generate a temporary verification code.
`EventGroup`	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** ID of the verification attempt. Verification can involve several attempts and use different verification methods. For example, in a user's session, a user enters an invalid verification code (first attempt). The user then enters the correct code and successfully verifies identity (second attempt). Both attempts are part of a single verification and, therefore, have the same ID. The label is Verification Attempt.
`LoginGeoId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The 18-character ID for the record of the geographic location of the user for a successful or unsuccessful identity verification attempt. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) may vary.
`LoginHistoryId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID for the record of the user's successful or unsuccessful login attempt.
`Policy`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The identity verification security policy or setting. The label is Triggered By. Available values are: • CustomApex—Identity verification made by a verification Apex method. • DeviceActivation—Identity verification required for users logging in from an unrecognized device or new IP address. This verification is part of Salesforce's risk-based authentication. • EnableLightningLogin—Identity verification required for users enrolling in Lightning Login. This verification is triggered when the user attempts to enroll. Users are eligible to enroll if they have the "Lightning Login User" user permission and the org has enabled "Allow Lightning Login" in Session Settings. • ExtraVerification—Reserved for future use.

Field Name	Details
	• HighAssurance—High assurance session required for resource access. This verification is triggered when the user tries to access a resource, such as a connected app, report, or dashboard that requires a high-assurance session level. • LightningLogin—Identity verification required for internal users logging in via Lightning Login. This verification is triggered when the enrolled user attempts to log in. Users are eligible to log in if they have the "Lightning Login User" user permission, have successfully enrolled in Lightning Login, and the org has enabled "Allow Lightning Login" in Session Settings. • PageAccess—Identity verification required for users attempting to perform an action, such as changing an email address or adding a two-factor authentication method. • PasswordlessLogin—Identity verification required for external users attempting to log in to a community that is set up for passwordless login. The admin controls which registered verification methods can be used, for example, email, SMS, Salesforce Authenticator, or TOTP. • ProfilePolicy—Session security level required at login. This verification is triggered by the "Session security level required at login" setting on the user's profile. • TwoFactorAuthentication—Two-factor authentication required at login. This verification is triggered by the "Two-Factor Authentication for User Interface Logins" user permission assigned to a custom profile. Or, the user permission is included in a permission set that is assigned to a user.
`Remarks`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The text the user sees on the screen or in Salesforce Authenticator when prompted to verify identity. For example, if identity verification is required for a user's login, the user sees "You're trying to Log In to Salesforce". In this instance, the `Remarks` value is "Log In to Salesforce". The exception is when the `Activity` value is Apex. In this instance, the `Remarks` value is a custom description passed by the Apex method. If the user is verifying identity using the Salesforce Authenticator app, the custom description displays in the app as well. If the custom description isn't specified, the default value is the name of the Apex method. The label is Activity Message.
`ResourceId`	**Type** reference **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description If the `Activity` value is ConnectedApp, the `ResourceId` value is the ID of the connected app. The label is Connected App ID.
`SourceIp`	**Type** string **Properties** Filter, Group, Sort **Description** The IP address of the machine from which the user attempted the action that requires identity verification. For example, the IP address of the machine from where the user tried to log in or access reports. If it's a non-login action that required verification, the IP address can be different from the address from where the user logged in. This address can be an IPv4 or IPv6 address.
`Status`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The status of the identity verification attempt. Available values are: • AutomatedSuccess—Salesforce Authenticator approved the request for access because the request came from a trusted location. After users enable location services in Salesforce Authenticator, they can designate trusted locations. When a user trusts a location for a particular activity, such as logging in from a recognized device, that activity is approved from the trusted location for as long as the location is trusted. • Denied—The user denied the approval request in the authenticator app, such as Salesforce Authenticator. • FailedGeneralError—An error caused by something other than an invalid verification code, too many verification attempts, or authenticator app connectivity. • FailedInvalidCode—The user provided an invalid verification code. • FailedTooManyAttempts—The user attempted to verify identity too many times. For example, the user entered an invalid verification code repeatedly. • Initiated—Salesforce initiated identity verification but hasn't yet challenged the user. • InProgress—Salesforce challenged the user to verify identity and is waiting for the user to respond or for Salesforce Authenticator to send an automated response. • RecoverableError—Salesforce can't reach the authenticator app to verify identity, but will retry.

Field Name	Details
	• ReportedDenied—The user denied the approval request in the authenticator app, such as Salesforce Authenticator, and also flagged the approval request to report to an administrator. • Succeeded—The user's identity was verified.
`UserId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the user verifying identity.
`VerificationMethod`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The method by which the user attempted to verify identity in the verification event. The label is Method. Available values are: • Email—Salesforce sent an email with a verification code to the address associated with the user's account. • EnableLL—Salesforce Authenticator sent a notification to the user's mobile device to enroll in Lightning Login. This value is available in API version 38.0 and later. • LL—Salesforce Authenticator sent a notification to the user's mobile device to approve login via Lightning Login. This value is available in API version 38.0 and later. • SalesforceAuthenticator—Salesforce Authenticator sent a notification to the user's mobile device to verify account activity. • Sms—Salesforce sent a text message with a verification code to the user's mobile device. • TempCode—A Salesforce admin or a user with the "Manage Two-Factor Authentication in User Interface" permission generated a temporary verification code for the user. This value is available in API version 37.0 and later. • Totp—An authenticator app generated a time-based, one-time password (TOTP) on the user's mobile device. • U2F—A U2F security key generated required credentials for the user. This value is available in API version 38.0 and later.
`VerificationTime`	**Type** dateTime

Field Name	Details
	Properties Filter, Sort **Description** The time of the identity verification attempt. The time zone is based on GMT. The label is Time.

Usage

Here are two examples of the types of API queries you can perform.

Query	String
Show verification history for a user's login record	`SELECT Activity, EventGroup, Policy, Remarks, Status, UserId,VerificationMethod, VerificationTime FROM VerificationHistory WHERE LoginHistoryId = '0YaD000#########'`
Get detailed geographic location information for a user's verification attempt	`SELECT City, CountryIso, Latitude, Longitude, PostalCode FROM LoginGeo WHERE LoginGeoId = '0LE###############'`

VisualforceAccessMetrics

Represents summary statistics for Visualforce pages.

Supported Calls

`count()`, `query()`, `retrieve()`

Fields

Field	Details
`ApexPageId`	**Type** reference **Properties** Aggregate, Filter, Group, Sort **Description** The ID of the Visualforce page.
`DailyPageViewCount`	**Type** integer

Field	Details
	Properties Aggregate, Filter, Group, Nillable, Sort **Description** The number of views received by the specified Visualforce page.
`MetricsDate`	**Type** date **Properties** Aggregate, Filter, Group, Sort **Description** The date the metrics are queried.

Usage

Use this object to query information on the Visualforce pages in your org.

```
SELECT ApexPageId,DailyPageViewCount,Id,MetricsDate FROM VisualforceAccessMetrics
```

VoiceCall

Represents a Lightning Dialer phone call.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CallDisposition`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The status of a phone call, such as whether a phone call is in progress, busy, or failed.
`CallDurationInSeconds`	**Type** int

Field Name	Details
	Properties Filter, Group, Nillable, Sort **Description** The total call duration in seconds.
`CallEndDateTime`	**Type** dateTime **Properties** Filter, Sort **Description** The time when a call ends.
`CallerIdType`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The number displayed for outbound calls. The possible values are: • VendorLine • CompanyNumber • LocalPresence
`CallStartDateTime`	**Type** dateTime **Properties** Filter, Sort **Description** The time when a call starts.
`CallType`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Whether a call is internal, inbound, or outbound.
`ConferenceKey`	**Type** string **Properties** Filter, Group, Nillable, Sort

Field Name	Details
	Description The related conference key. This field's only available if call monitoring is enabled.
`CurrencyCode`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The currency used to bill the call.
`FromCountry`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The country that the context user is dialing from.
`FromPhoneNumber`	**Type** phone **Properties** Filter, Group, Sort **Description** The phone number of the user who initiated the call.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this VoiceCall.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this VoiceCall. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.

Field Name	Details
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who owns the phone number.
Price	**Type** double **Properties** Filter, Nillable, Sort **Description** The cost of the phone call.
RelatedRecordId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the related record.
ToCountry	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The country that is being called.
ToPhoneNumber	**Type** phone **Properties** Filter, Group, Sort **Description** The recipient of the phone call.
UserId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the Dialer user.

Field Name	Details
VendorCallKey	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the child leg of the call that's provided by the Dialer vendor.
VendorParentCallKey	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The ID of the parent leg of the call that's provided by the Dialer vendor.
VendorType	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Whether the vendor is Twilio or a custom vendor.
VoiceVendorLineId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the associated Dialer vendor line.

VoiceCallList

Represents a prioritized list of numbers to call.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the call list is active or not.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the call list.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the call list owner.

VoiceCallListItem

Represents a single phone number in a prioritized call list.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CallListId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the related call list.
`Ordinal`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order of the item in the overall call list.
`RelatedRecordId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the related record.
`State`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Whether the call list item is not called, called, or skipped.

VoiceCallListShare

Represents a sharing entry on a VoiceCallList.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description Level of access that the user or group has to the VoiceCallList. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for call lists.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceCallList that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. Valid values include: • Owner • Manual • Rule
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the call list. This field can't be updated.

VoiceCallShare

Represents a sharing entry on a VoiceCall object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceCall. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for Dialer calls.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceCall that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. Valid values include: • Owner • Manual • Rule
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The ID of the user or group that was given access to the Dialer call. This field can't be updated.

VoiceCoaching

Represents a call that is using call monitoring.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`OwnerId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the manager monitoring the call.
`RelatedRecordId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the call list owner.
`TraineeId`	**Type** reference **Properties** Filter, Group, Sort, Unique **Description** The ID of the call list owner.

VoiceCoachingShare

Represents a sharing entry on a VoiceCoaching record.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceCoaching record. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for call lists.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceCoaching record that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. Valid values include: • Owner • Manual • Rule

Field Name	Details
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the record. This field can't be updated.

VoiceLocalPresenceNumber

Represents a phone number with the same area code as the person who's being called.

Supported Calls

`query()`, `retrieve()`

Fields

Field Name	Details
CountryCode	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The country code of the phone number.
LastUsedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date the phone number was last used.
PhoneNumber	**Type** phone **Properties** Filter, Group, Sort **Description** The local presence phone number.

Field Name	Details
Prefix	**Type** reference **Properties** Filter, Group, Sort **Description** The area code of the phone number.

VoiceMailContent

Represents a voicemail message left by a caller to the context user.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
DurationInSeconds	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of the voicemail message in seconds.
FirstHeardDateTime	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time and date when the user first listened to the voicemail message.
MediaContentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The ID of the related media content, a ContentDocument. The record counts toward your org's file storage quota.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the voicemail message.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the owner of the voicemail message.
`VoiceCallId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the related Dialer call.

VoiceMailContentShare

Represents a sharing entry on a VoiceMailContent.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceMailContent. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for voicemail messages.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceMailContent that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. Valid values include: • Owner • Manual • Rule
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the voicemail message. This field can't be updated.

VoiceMailGreeting

Represents a custom greeting message that plays upon reaching a user's voicemail. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DurationInSeconds`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of the voicemail greeting message in seconds.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the greeting is the user's default greeting (`true`) or not (`false`).
`MediaContentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** ID of the related content document.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the voicemail greeting message.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the voicemail greeting message owner.

VoiceMailGreetingShare

Represents a sharing entry on a VoiceMailGreeting. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceMailGreeting. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for voicemail messages.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceMailGreeting that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in versions 32.0 and later with the correct organization-wide sharing settings.
`UserOrGroupId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the voicemail greeting message. This field can't be updated.

VoiceMailMessage

Represents a prerecorded voicemail message.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`DurationInSeconds`	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The duration of a prerecorded voicemail message in seconds.
`IsDefault`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Specifies whether the message is the context user's default voicemail drop message.
`MediaContentId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the file.

Field Name	Details
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the prerecorded voicemail message.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The owner of the prerecorded voicemail message.

VoiceMailMessageShare

Represents a sharing entry on a VoiceMailMessage.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceMailMessage. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for voicemail messages.

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceMailMessage that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. Valid values include: • Owner • Manual • Rule
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the prerecorded voicemail message. This field can't be updated.

VoiceUserLine

Represents a user's forwarding phone number.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
IsVerified	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Reserved for future use.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort **Description** The name of the phone number.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The ID of the user who owns the phone number.
`PhoneNumber`	**Type** phone **Properties** Create, Filter, Group, Sort, Update **Description** The user's phone number.
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the user using the phone number.

VoiceUserLineShare

Represents a sharing entry on a user's phone number.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceUserLine. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for phone numbers.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the parent object, if any.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the VoiceUserLine.

VoiceUserPreferences

Represents the number the user displays when making outbound calls. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CallerIdType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The number displayed for outbound calls. The possible values are: • VendorLine • CompanyNumber • LocalPresence
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the phone number owner.

VoiceUserPreferencesShare

Represents a sharing entry on a VoiceUserPreferences object. This object is available in API version 41.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceUserPreferences. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for phone numbers.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the VoiceUserPreferences that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in versions 32.0 and later with the correct organization-wide sharing settings.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the phone number preference. This field can't be updated.

VoiceVendorInfo

Represents information about the Lightning Dialer provider's vendor.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Fields

Field Name	Details
`CompanyNumber`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The standard company number that users can choose to display when making outgoing calls.
`IsActive`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Specifies whether the vendor is active or not.
`LocalPresenceDefaultNumber`	**Type** phone **Properties** Filter, Group, Nillable, Sort **Description** The default routing number that's available for incoming local presence calls.
`VendorAccountKey`	**Type** string **Properties** Filter, Group, idLookup, Sort **Description** The account key of the vendor.
`VendorProviderName`	**Type** string

Field Name	Details
	Properties Filter, Group, Sort **Description** The name of the vendor.
VendorType	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The type of vendor.

VoiceVendorLine

Represents a user's phone number reserved with the vendor.

Supported Calls

describeSObjects(), getDeleted(), getUpdated(), query(), retrieve()

Fields

Field Name	Details
CallUsageInSecondsLastMonth	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** An org's total call usage last month in seconds.
OwnerId	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the user who owns the phone number.
PhoneNumber	**Type** phone

Field Name	Details
	Properties Filter, Group, idLookup, Sort, Update **Description** The unique vendor phone number.
`ShouldRecord`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Reserved for future use.
`Status`	**Type** boolean **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** Specifies whether the number is currently active or released.
`UserId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the user using the phone number.
`VoiceVendorInfoId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the Dialer vendor.

VoiceVendorLineShare

Represents a sharing entry on a vendor's phone number.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the VoiceVendorLine. The possible values are: • Read • Edit • All This field must be set to an access level higher than the organization's default access level for phone numbers.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the parent object, if any.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** Reason that this sharing entry exists. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that has been given access to the VoiceVendorLine.

Vote

Represents a vote that a user has made on an Idea or a Reply.

Note: In API version 16.0 and earlier, SOQL queries on the Vote object only return votes for the Idea object. Starting in API version 17.0, SOQL queries return votes for both Idea and Reply.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field	Details
`IsDeleted`	**Type** boolean **Properties** Defaulted on create, Filter **Description** Indicates whether the object has been moved to the Recycle Bin (true) or not (false). Label is **Deleted**.
`LastModifiedById`	**Type** reference **Properties** Defaulted on create, Filter, Group, Sort **Description** ID of the user most recently associated with this vote.
`LastModifiedDate`	**Type** dateTime **Properties** Defaulted on create, Filter, Sort **Description** The datetime when this vote was last modified.
`ParentId`	**Type** reference **Properties** Group, Sort, Create, Filter **Description** ID of the Idea or Reply associated with this vote.
`Type`	**Type** picklist **Properties** Group, Sort, Create, Filter, Restricted picklist, Update

Field	Details
	Description Picklist that indicates the type of vote. The value `Up` indicates that the vote is a user's positive endorsement of the associated idea or reply. The value `Down` indicates that the vote is a user's negative endorsement of the associated idea or reply.

Note: If you are importing Vote data into Salesforce and need to set the value for an audit field, such as `CreatedDate`, contact Salesforce. Audit fields are automatically updated during API operations unless you request to set these fields yourself..

Usage

In version 12.0 and later, use this object to track the votes that users made on ideas. For more information on ideas, see "Ideas Overview" in the Salesforce online help.

In version 17.0 and later, use this object to track the votes users made on replies. For more information, see "Answers Overview" in the Salesforce online help.

In version 17.0 and later, you must filter using the following syntax when querying this object in a SOQL query: `ParentId = `***`single ID`***, `Parent.Type = `***`single Type`***, `Id = `***`single ID`***, or `Id IN (`***`list of IDs`***). See Comparison Operators in the *Salesforce SOQL and SOSL Reference Guide* for a sample query.

A SOQL query must filter using one of the following Parent or Id clauses.

- `ParentId = [`***`single ID`***`]`
- `Parent.Type = [`***`single type`***`]`
- `Id = [`***`single ID`***`]`
- `Id IN = [`***`list of IDs`***`]`

SEE ALSO:

Idea

IdeaComment

WebLink

Represents a custom link to a URL or Scontrol.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Special Access Rules

- To create a custom link, the client application must be logged in with the "Customize Application" permission.
- Customer Portal users can't access this object.

Fields

Field Name	Details
Availability	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description**
Description	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** Description of the custom link. Limit is 1,000 characters.
DisplayType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Type of display: button, link, or mass-action button.
EncodingKey	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Encoding of parameters on the URL link.
HasMenubar	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows a menu bar (`true`) or not (`false`).
HasScrollbars	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description Indicates whether the popup window shows scroll bars (`true`) or not (`false`).
`HasToolbar`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows browser toolbars (`true`) or not (`false`). Toolbars normally contain navigation buttons like Back, Forward, and Print.
`Height`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Height of the popup in pixels.
`IsProtected`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the object is protected (`true`) or not (`false`). Protected components that have been installed in other organizations can't be linked to or referenced by components created in the subscriber organization. A developer can easily delete a protected component contained in a managed package in a future release of the package without worrying about failing installations. However, once a component is marked as unprotected and is released globally, the developer can't delete it.
`IsResizable`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether users are allowed to resize the popup window (`true`) or not (`false`).
`LinkType`	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. Type of link (S-control or URL).
`MasterLabel`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Master label for the link. Limit is 240 characters. This display value is the internal label that is not translated.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Required. Name to display on page.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. This field can't be accessed unless the logged-in user has the "Customize Application" permission.

Field Name	Details
OpenType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Required. How the custom link opens when clicked in a browser—NewWindow, Sidebar, or NoSidebar.
PageOrSobjectType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort **Description** Required. For standard objects, the name of the page on which to display the custom link. For custom objects, the name of the object.
Position	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Location on the screen where the popup should open—TopLeft, FullScreen, or None.
RequireRowSelection	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the custom link requires a row selection (`true`) or not (`false`).
ScontrolId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** ID of the custom s-control object (Scontrol) to link to. Can include fields as tokens within the custom s-control object. Label is **Custom S-Control ID**.
ShowsLocation	**Type** boolean

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the popup window shows the browser's address bar containing the URL (`true`) or not (`false`).
`ShowsStatus`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Show the status bar at the bottom of the browser.
`Url`	**Type** textarea **Properties** Create, Nillable, Update **Description** Required. URL of the page to link to. Can include fields as tokens within the URL. Limit: 1,024 KB.
`Width`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Width of the popup in pixels.

Usage

Use this object to programmatically manage custom links, which allow client applications to integrate data with external URLs, an organization's intranet, or other back-end office systems. A custom link can point to:

- An external URL, such as `www.google.com` or your company's intranet.
- A custom s-control, such as a Java applet or Active-X control.

Custom links can include fields as tokens within the URL or custom s-control.

SEE ALSO:

Scontrol

WebLinkLocalization

Represents the translated value of the field label for a custom link to a URL or s-control when the Translation Workbench is enabled for your organization.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

- Your organization must be using Professional, Enterprise, Developer, Unlimited, or Performance Edition and be enabled for the Translation Workbench.
- To view this object, you must have the "View Setup and Configuration" permission.

Fields

Field	Details
`LanguageLocaleKey`	**Type** picklist **Properties** Create, Filter, Nillable, Restricted picklist **Description** This field is available in API version 16.0 and earlier. It is the same as the `Language` field.
`Language`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** This field is available in API version 17.0 and later. The combined language and locale ISO code, which controls the language for labels displayed in an application. This picklist contains the following fully-supported languages: • Chinese (Simplified): `zh_CN` • Chinese (Traditional): `zh_TW` • Danish: `da` • Dutch: `nl_NL` • English: `en_US` • Finnish: `fi`

Field	Details
	• French: `fr` • German: `de` • Italian: `it` • Japanese: `ja` • Korean: `ko` • Norwegian: `no` • Portuguese (Brazil): `pt_BR` • Russian: `ru` • Spanish: `es` • Spanish (Mexico): `es_MX` • Swedish: `sv` • Thai: `th` The following end-user only languages are available. • Arabic: `ar` • Bulgarian: `bg` • Croatian: `hr` • Czech: `cs` • English (UK): `en_GB` • Greek: `el` • Hebrew: `iw` • Hungarian: `hu` • Indonesian: `in` • Polish: `pl` • Portuguese (European): `pt_PT` • Romanian: `ro` • Slovak: `sk` • Slovenian: `sl` • Turkish: `tr` • Ukrainian: `uk` • Vietnamese: `vi` The following platform languages are available for organizations that use Salesforce exclusively as a platform. • Albanian: `sq` • Arabic (Algeria): `ar_DZ` • Arabic (Bahrain): `ar_BH` • Arabic (Egypt): `ar_EG` • Arabic (Iraq): `ar_IQ` • Arabic (Jordan): `ar_JO`

Field	Details
	• Arabic (Kuwait): `ar_KW` • Arabic (Lebanon): `ar_LB` • Arabic (Libya): `ar_LY` • Arabic (Morocco): `ar_MA` • Arabic (Oman): `ar_OM` • Arabic (Qatar): `ar_QA` • Arabic (Saudi Arabia): `ar_SA` • Arabic (Sudan): `ar_SD` • Arabic (Syria): `ar_SY` • Arabic (Tunisia): `ar_TN` • Arabic (United Arab Emirates): `ar_AE` • Arabic (Yemen): `ar_YE` • Armenian: `hy` • Basque: `eu` • Bosnian: `bs` • Bengali: `bn` • Catalan: `ca` • Chinese (Simplified—Singapore): `zh_SG` • Chinese (Traditional—Hong Kong): `zh_HK` • Dutch (Belgium): `nl_BE` • English (Australia): `en_AU` • English (Canada): `en_CA` • English (Hong Kong): `en_HK` • English (India): `en_IN` • English (Ireland): `en_IE` • English (Malaysia): `en_MY` • English (Philippines): `en_PH` • English (Singapore): `en_SG` • English (South Africa): `en_ZA` • Estonian: `et` • French (Belgium): `fr_BE` • French (Canada): `fr_CA` • French (Luxembourg): `fr_LU` • French (Switzerland): `fr_CH` • Georgian: `ka` • German (Austria): `de_AT` • German (Belgium): `de_BE` • German (Luxembourg): `de_LU`

Field	Details
	• German (Switzerland): `de_CH` • Hindi: `hi` • Icelandic: `is` • Irish: `ga` • Italian (Switzerland): `it_CH` • Latvian: `lv` • Lithuanian: `lt` • Luxembourgish: `lb` • Macedonian: `mk` • Malay: `ms` • Maltese: `mt` • Romanian (Moldova): `ro_MD` • Montenegrin: `sh_ME` • Romansh: `rm` • Serbian (Cyrillic): `sr` • Serbian (Latin): `sh` • Spanish (Argentina): `es_AR` • Spanish (Bolivia): `es_BO` • Spanish (Chile): `es_CL` • Spanish (Colombia): `es_CO` • Spanish (Costa Rica): `es_CR` • Spanish (Dominican Republic): `es_DO` • Spanish (Ecuador): `es_EC` • Spanish (El Salvador): `es_SV` • Spanish (Guatemala): `es_GT` • Spanish (Honduras): `es_HN` • Spanish (Nicaragua): `es_NI` • Spanish (Panama): `es_PA` • Spanish (Paraguay): `es_PY` • Spanish (Peru): `es_PE` • Spanish (Puerto Rico): `es_PR` • Spanish (United States): `es_US` • Spanish (Uruguay): `es_UY` • Spanish (Venezuela): `es_VE` • Tagalog: `tl` • Tamil: `ta` • Urdu: `ur` • Welsh: `cy`

Field	Details
	The values in this field are not related to the default locale selection.
`NamespacePrefix`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the ***`namespacePrefix__componentName`*** notation. The namespace prefix can have one of the following values: • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, `NamespacePrefix` is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.
`Value`	**Type** string **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual translated label of the custom link. Label is **Translation**.
`WebLinkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the WebLink that is being translated.

Usage

Use this object to translate your custom links to URLs or s-controls into the different languages supported by Salesforce. Users with the Translation Workbench enabled can view custom link translations, but either the "Customize Application" or "Manage Translation" permission is required to create or update custom link translations.

SEE ALSO:

CategoryNodeLocalization

ScontrolLocalization

WorkAccess

Used to grant or restrict user access to give badge definitions. Each badge definition record must have one WorkAccess record.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkAccess is not available through Schema Builder and is not customizable. A WorkAccess record is **required** for users to **Give** BadgeDefinitions. If a WorkAccess record is not created, BadgeDefinitions will not be available to users.

The sharing of WorkAccess records is through WorkAccessShare on page 2520 For each WorkBadgeDefinition record, you must create both a WorkAccess record (per WorkBadgeDefinition) and WorkAccessShare records for sharing to users or groups.

Fields

Field Name	Details
AccessType	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Define the type of Access given to user ("Give").
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce unique ID for owner of Access record.

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID for BadgeDefinition record associated with this Access record.

WorkAccessShare

Used to control Givers of WorkBadgeDefinition records.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Additional Considerations and Related Objects

Related to WorkAccess Object. WorkAccess is the parent of WorkAccessShare.

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
AccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** CRUD Access Level (picklist values: Read Only, Read/Write, Owner).
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for WorkAccess record.

Field Name	Details
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Owner or Manual sharing. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** User or Group ID for WorkAccess.

WorkBadge

Represents information about who the badge was given to and which badge was given. A WorkBadge record is created for each recipient of a WorkBadgeDefinition.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadge is a lookup to WorkThanks. Each WorkBadge record must derive a SourceId from WorkThanks. There can be multiple WorkBadge records tied to a single WorkThanks record.

Fields

Field Name	Details
DefinitionId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. Salesforce unique ID for the given WorkBadgeDefinition record given.

Field Name	Details
Description	**Type** textarea **Properties** Nillable **Description** The description of the WorkBadgeDefinition.
GiverId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the badge giver.
ImageUrl	**Type** url **Properties** Filter, Group, Nillable, Sort **Description** The URL of the badge image.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkBadge.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkBadge. If this value is null, this record might have been only referenced (LastReferencedDate) and not viewed.
Message	**Type** textarea **Properties** Nillable

Field Name	Details
	Description The message accompanying the thanks badge.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkBadge is associated with. This field is available only if Salesforce Communities is enabled in your organization.
`RecipientId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Required. Salesforce unique ID for User who is the Recipient of Badge.
`RewardId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce unique ID for Reward given with badge (if Reward Badge)
`SourceId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce unique ID for Thanks record referenced to this badge.

WorkBadgeDefinition

Represents the attributes of a badge including the badge name, description, and image. Each WorkBadge record must have a lookup to a WorkBadgeDefinition since badge attributes (like badge name) are derived from the WorkBadgeDefinition object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadgeDefinition has a field called `ImageUrl` that references a DocumentID. This is a required field for creating a Badge.

To grant “giver” access to a WorkBadgeDefinition, you must also create the WorkAccess (and the related WorkAccessShare) records.

Each WorkBadgeDefinition has an `ImageUrl` field that must be populated with a DocumentID of the Document record containing the badge image.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Update **Description** Required. Limit: 4000 characters. The description of the badge and what it means to receive this badge.
`GivenBadgeCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of badges given per user or across all users. Note: This field can’t be added in a list view or referenced in a formula field.
`ImageUrl`	**Type** url **Properties** Create, Filter, Group, Sort, Update **Description** Required. This is the badge image that will be displayed in the UI. Use DocumentID or ImageURL.
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents whether a WorkBadgeDefinition is active and available in the UI.

Field Name	Details
IsCompanyWide	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents a special class of badges known as Company Badges. Company badges are visible to the entire company and visible in specific list view filters. Note: If this field is selected, everyone within the user's network will be able to give the badge automatically. If this field is not selected, people with sharing must be added to the badge's access list in order to give the badge.
IsLimitPerUser	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the badge limit is per user (`true`) or across all users (`false`). The default value is `false`.
IsRewardBadge	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the badge is a reward badge (`true`) or not (`false`).
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkBadgeDefinition.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The time stamp that indicates when the current user last viewed this WorkBadgeDefinition. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`LimitNumber`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The badge limit per user or across all users.
`LimitStartDate`	**Type** dateTime **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The start date of the badge limit. The date can be reset to the current date.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the Badge. **Label:** Badge Title.
`NetworkId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkBadgeDefinition is associated with. This field is available only if Salesforce Communities is enabled in your organization.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce User ID for User who is the Owner of the WorkBadgeDefinition record (usually the creator of the record)

Field Name	Details
RewardFundId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce unique ID for the WorkRewardFund that is associated with this WorkBadgeDefinition. WorkBadgeDefinition records with a RewardFundID indicate a Reward Badge.

WorkBadgeDefinitionHistory

Represents the history of changes to the values in the fields of a WorkBadgeDefinition object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Type of change (e.g., created).
NewValue	**Type** Any Type **Properties** Nillable, Sort **Description** Updated value of record.
OldValue	**Type** Any Type **Properties** Nillable, Sort

Field Name	Details
	Description Previous value of record.
`WorkBadgeDefinitionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of WorkBadgeDefinition record.

WorkBadgeDefinitionShare

Represents a sharing entry on a WorkBadgeDefinition object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the work badge definition. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records This field must be set to an access level that is higher than the organization's default access level for work badge definitions.
`ParentId`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Sort **Description** ID of the WorkBadgeDefinition object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkBadgeDefinition or is in a user role above the WorkBadgeDefinition owner in the role hierarchy. • Manual: User or group has access, because a user with “All” access manually shared the WorkBadgeDefinition with the user or group. • Rule: User or group has access via a WorkBadgeDefinition sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the work badge definition. This field can’t be updated.

WorkCoaching

Represents a single coaching relationship between two users. One of the users is defined as the coach and the other is defined as a coachee. WorkCoaching is feed-enabled so there is a private feed available to the coach and coachee.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
CoachId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The coach in this 1:1 coaching relationship.
CoachedId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The user being coached in this 1:1 coaching relationship.
IsInactive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the coaching relationship is *Inactive* (true) or not (false).
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this coaching relationship.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this coaching relationship. If this value is null, this record might have been only referenced (LastReferencedDate) and not viewed.

Field Name	Details
Name	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** [Required] The record’s name. Max length is 255 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the contact who owns the WorkCoaching record.

WorkCoachingFeed

Represents a single feed item in the feed on the detail page for a coaching record.

A coaching feed shows recent changes to a lead record for any fields that are tracked in feeds, and posts and comments about the record. It’s a useful way to stay up-to-date with changes made to coaching in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

You can delete all feed items that you created. To delete feed items that you didn’t create, you must have one of these permissions:

- “Modify All Data”
- “Modify All” on the WorkCoachingFeed object
- “Moderate Chatter”

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort

Field Name	Details
	Description The content of the FeedItem. Required when Type is TextPost. Optional when Type is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file that is uploaded to the feed. Required if Type is ContentPost. The name of the file that is uploaded to the feed. Setting ContentFileName automatically sets Type to ContentPost.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The size of the file (in bytes) that is uploaded to the feed.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The MIME type of the file that is uploaded to the feed.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, InsertedById is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>`

Field Name	Details
	• `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes that are associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. If Salesforce Communities is enabled for your organization, this field is available in API version 28.0 and later. `NetworkScope` can have the following values. • `NetworkId`: The ID of the community in which the FeedItem is available. If left empty, the feed item is available only in the default community. • `AllNetworks`: The feed item is available in all communities. Note the following exceptions for `NetworkScope`. • Only feed items with a CollaborationGroup or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`.

Field Name	Details
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the WorkCoaching record that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of type ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence.

Field Name	Details
	• `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case.

Field Name	Details
	• `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case. Note: If you set Type to ContentPost, also specify ContentData and ContentFileName.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The visibility of a FeedItem: • AllUsers: visible to all users • InternalUsers: visible to internal users

WorkCoachingHistory

Represents the history of changes to the values in the fields of a WorkCoaching object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkCoachingId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the WorkCoaching object.

WorkCoachingShare

Represents a sharing entry on a WorkCoaching object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update

Field Name	Details
	Description The user's or group's level of access to the coaching relationship. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for coaching relationships.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkCoaching object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the coaching relationship or is in a user role above the coaching relationship owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the coaching relationship with the user or group. • Rule: User or group has access via a sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the coaching relationship. This field can't be updated.

WorkFeedback

Represents the answer to a question that a person was asked via a feedback request. Also used to store offered feedback without linking it to a particular question.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`,`search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

- Ownership is transferred to the requester on submit for certain types (ad-hoc feedback).
- The record is read-only after the request that it's linked to is set to Submitted.
- You can't link a feedback object to a request unless you are the recipient.
- The question that the feedback is linked to must be part of the same question set that the request is linked to.

Fields

Field Name	Details
`Feedback`	**Type** textarea **Properties** Create, Nillable, Update **Description** Contains either the free-form text of the answer, or the choice selected by the user. Max length is 65536.
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The name of the WorkFeedback record.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedback record.

Field Name	Details
QuestionId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The question this answer applies to. When this feedback is linked to a request of an unsolicited type, the question ID is null.
RequestId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the request this response belongs to, in case of offered feedback.

WorkFeedbackHistory

Represents the history of changes to the values in the fields of a WorkFeedback object. Access is read-only.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.

Field Name	Details
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
WorkFeedbackId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the WorkFeedback object.

WorkFeedbackQuestion

Represents a free-form text type or multiple choice question within a set of questions.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
Choices	**Type** textarea **Properties** Create, Nillable, Update **Description** New-line separated list of valid choices for multiple choice questions. Maximum length is 1000 characters.
Detail	**Type** textarea **Properties** Create, Nillable, Update

Field Name	Details
	Description Detailed instructions on how to answer the question.
IsConfidentialAnswer	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Answers to questions marked confidential will not be shared with the subject of the review. This field applies only to performance summaries.
IsOptional	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If this option is selected, the question is optional and isn't required to be answered. This field applies only to performance summaries.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** A short description of the question, which can be used as a header for reports and Calibration.
Number	**Type** int **Properties** Create, Filter, Group, Sort, Update **Description** The order of the question that is displayed within the question set, such as question number three in a question set that has five questions.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackQuestion.

Field Name	Details
QuestionSetId	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The question set this question is a part of.
Text	**Type** textarea **Properties** Create, Update **Description** The body of the question. Max length is 16384 characters.
Type	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Allows for either a free-form text answer or a multiple choice question defined by new-line separate choices in the 'Choices' field. Valid picklist values are: • MultipleChoice • FreeText • Rating

WorkFeedbackQuestionHistory

Represents the history of changes to the values in the fields of a WorkFeedbackQuestion.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist

Field Name	Details
	Properties Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkFeedbackQuestionId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the WorkFeedbackQuestion.

WorkFeedbackQuestionSet

Represents a set of questions being asked. The question set is used to link all the individual requests where different recipients were asked the same set of questions on the same subject.

In the Work.com performance application, a question set defines the type of summaries and their due dates that will accompany the deployment of a specific performance summary cycle.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
DueDate	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date that this specific question set is expected to be submitted by the recipient. This field applies only to performance summaries.
FeedbackType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The description of the collection of questions that are written in context to the type of recipient answering them, relative to the subject of the summary. This field applies only to performance summaries.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the question set. Maximum length is 225 characters.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackQuestionSet.
PerformanceCycleId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** If a question set is associated to a performance summary cycle, then that cycle ID is referenced in this field. This field applies only to performance summaries.

WorkFeedbackQuestionSetHistory

Represents the history of changes to the values in the fields of a WorkFeedbackQuestionSet object. Access is read-only.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkFeedbackQuestionSetId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the WorkFeedbackQuestionSet object.

WorkFeedbackQuestionSetShare

Represents a sharing entry on a WorkFeedbackQuestionSet.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the feedback question set. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for feedback question sets.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkFeedbackQuestionSet object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkFeedbackQuestionSet or is in a user role above the WorkFeedbackQuestionSet owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the WorkFeedbackQuestionSet with the user or group. • Rule: User or group has access via a WorkFeedbackQuestionSet sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the feedback question set. This field can't be updated.

WorkFeedbackQuestionShare

Represents a sharing entry on a WorkFeedbackQuestion.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the feedback question. The possible values are:

Field Name	Details
	• Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for feedback questions.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkFeedbackQuestion object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkFeedbackQuestion or is in a user role above the WorkFeedbackQuestion owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the WorkFeedbackQuestion with the user or group. • Rule: User or group has access via a WorkFeedbackQuestion sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the feedback question. This field can't be updated.

WorkFeedbackRequest

Represents a single feedback request on a subject or topic (question) to a single recipient in the feedback application. In the case of offered feedback, WorkFeedbackRequest represents feedback that is offered about a subject. In the performance application, WorkFeedbackRequest represents a request for feedback on a set of questions from a question set, on a subject—for the recipient to complete and submit.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

- After a request's state is changed to Submitted, fields can't be changed, except for LastSharedDate and IsUnreadByOwner.
- If LastRemindDate is updated, a reminder notification will be sent to the request's recipient (only possible when request is in Draft state).
- When a new request is created, a notification is sent to the recipient.
- When a recipient of a request submits their feedback (Draft->Submitted), a notification will be sent to requester (except for offered feedback).
- Requester cannot modify the subject of the question set after a request is created.
- For offered feedback (to user, to manager, or both), the person who is offering feedback is both the creator of WorkFeedbackRequest as well as the recipient.

Fields

Field Name	Details
`AdHocFeedback`	**Type** textarea **Properties** Create, Filter, Nillable, Sort **Description** The content of the feedback.
`AdHocQuestion`	**Type** textarea **Properties** Create, Filter, Nillable, Sort **Description** The content of the feedback question.
`Description`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The description of the WorkFeedbackRequest.
FeedbackRequestState	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The current state of the feedback request. Allowed picklist values are: • Draft • Submitted • Declined
FeedbackType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort **Description** Specifies the type of request. Picklist values that are used for performance summaries: • Unspecified • Peer Summary • Self Summary • Manager Summary • Skip Level Summary Picklist values that are used for feedback: • Personal • Unsolicited to User • Unsolicited to Manager • Unsolicited to User and Manager • On Topic The type of the feedback determines the sharing and visibility rules that are applied to answers.
IsDeployed	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description If `true`, the feedback is part of a deployed performance summary cycle.
`IsShareWithSubject`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the feedback is shared with the summary subject.
`IsUnreadByOwner`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the submitted request has not been seen by the requester.
`IsUnsolicited`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** If `true`, the feedback request is unsolicited feedback offered to another user.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkFeedbackRequest.
`LastRemindDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time a reminder was sent to the recipient of this draft request.
`LastSharedDate`	**Type** dateTime

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** The last time this request was shared with another user or group.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkFeedbackRequest. If this value is null, this record might have been only referenced (LastReferencedDate) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the WorkFeedbackRequest.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkFeedbackRequest.
PerformanceCycleId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Used by performance summaries to link to a summary cycle. This field applies only to performance summaries.
QuestionSetId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Question set associated with the current request.

Field Name	Details
RecipientId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** User asked to provide feedback on the subject.
RelatedObjectId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** Specifies a record in the system that this feedback request is related to. Used by ad-hoc feedback to gather feedback in the context of an opportunity or Work.com goal. Used by performance summaries to link to a summary cycle.
SharingScope	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The users that see the feedback. `SharingScope` can have the following values: • Nobody • Subject • Manager • SubjectAndManager
SubjectId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort **Description** The ID of the user that this request (or offer) is about.
SubmitFeedbackToId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The ID of the person this performance summary feedback request (and its respective answers) is shared with. It's also the ID of the person who owns the requested subject's manager summary request. This field applies only to performance summaries.
`SubmittedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The last time (in case it was reopened by admin) this request was submitted by the recipient. This field applies only to performance summaries.

WorkFeedbackRequestFeed

Represents a single feed item in the feed displayed on the feedback request detail page.

The feedback request feed shows changes to a request for fields that are tracked in feeds, posts, and comments about the request.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when Type is TextPost. Optional when Type is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** The file uploaded to the feed. Required if Type is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets Type to ContentPost.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.

Field Name	Details
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates posts and comments from another application into a feed, then InsertedById is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>` • `<u>` • `<s>` • `<ul>` • `<ol>` • `<li>` • `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
`LinkUrl`	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the goal record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated.

Field Name	Details
	The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.

WorkFeedbackRequestHistory

Represents the history of changes to the values in the fields of a WorkFeedbackRequest.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkFeedbackRequestId`	**Type** picklist **Properties** Filter, Group, Sort **Description** ID of the WorkFeedbackRequest.

WorkFeedbackRequestShare

Represents a sharing entry on a WorkFeedbackRequest.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the feedback request. The possible values are:

Field Name	Details
	• Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for feedback requests.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkFeedbackRequest object that is associated with this sharing entry.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkFeedbackRequest or is in a user role above the WorkFeedbackRequest owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the WorkFeedbackRequest with the user or group. • Rule: User or group has access via a WorkFeedbackRequest sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the feedback request. This field can't be updated.

WorkFeedbackShare

Represents a sharing entry on a WorkFeedback object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the feedback. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for feedback.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkFeedback object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkFeedback or is in a user role above the WorkFeedback owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the WorkFeedback with the user or group.

Field Name	Details
	• Rule: User or group has access via a WorkFeedback sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the feedback. This field can't be updated.

WorkGoal

Represents the components of a goal, such as its description and associated metrics. This object has been deprecated as of API version 35.0. Use the Goal object to query information about Work.com goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Related

WorkGoalCollaborator, WorkGoalLink, WorkGoalFeed

Fields

Field Name	Details
`ActualValue`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The actual value of the WorkGoal metric. Applicable only to WorkGoal objects of `Type`: Metric.
`ActualValueExternalUrl`	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description Contains a URL that references work.com data synchronization for the actual value of a metric. Applicable only to WorkGoal objects of `Type`: Metric.
`CompletionDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The completion date of the goal. Note: Field-level security limits access to only administrators and owners by default, and only they can complete a goal.
`Description`	**Type** textarea (max length 4000) **Properties** Create, Nillable, Update **Description** The description of the goal.
`DueDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date the WorkGoal object is due (optional). Applicable only to WorkGoal objects of `Type`: Metric.
`FlaggedAs`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The progress of the WorkGoal object. Applicable only to WorkGoal objects of `Type`: Metric. Possible values: • On Track: Progress on the metric is on track. • Behind: Progress on the metric is behind schedule. • Postponed: The metric is postponed. • Critical: Progress on the metric is critical.

Field Name	Details
ImageUrl	**Type** url **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The URL for the goal image. The image must be stored in Documents and set as externally available. Applicable only to WorkGoal objects of `Type`: Goal.
InitialValue	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The initial value of the WorkGoal metric. Applicable only to WorkGoal objects of `Type`: Metric and `MetricType`: Progress or Percent.
IsKeyCompanyGoal	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Used to indicate if the goal is a key company goal. Used for the Company Goal Showcase. Applicable only to WorkGoal objects of `Type`: Goal.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this goal.
LastSyncDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The time stamp that indicates when the actual value was last synced with the associated metrics report.
LastViewedDate	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this goal.
`MetricType`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The type of metric that is represented. (See values in the following list). Applies only to WorkGoal objects of `Type`: Metric. Possible values: • Progress: ActualValue / TargetValue as a percentage • Percent: the metric as a percentage only • YesNo: the completed / not completed metric as a milestone • Absolute: Deprecated
`MetricTypeDataSource`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Specifies how the metric (ActualValue and CurrentValue) is updated. Applies only to WorkGoal objects of `Type`: Goal and Metric. Possible values: • Manual: indicates that the actual and target value of the metric is updated manually by the user • Rollup: indicates that the actual and target value of a goal is rolled up automatically by Work.com Goals • DataSyncActualOnly: indicates that the actual value of the metric is linked to a Salesforce report
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the WorkGoal object. (Maximum length is 255.)

Field Name	Details
OverallStatus	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The overall calculated status of the WorkGoal based on `FlaggedAs` and `CompletionDate`.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the user who owns the WorkGoal.
ParentId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the structural parent of the WorkGoal. For example, a goal that has a metric is represented by a WorkGoal of `Type` Metric, which has a parent of WorkGoal of Type Goal. Note: The root and the parent must be set to the parent goal for any child metrics.
Progress	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read Only. The overall progress of the WorkGoal.
RootId	**Type** reference to a WorkGoal object **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Specifies the structural root of the WorkGoal. For example, a goal that has a metric is represented by a WorkGoal of `Type` Metric, which has a root of WorkGoal of `Type` Goal.

Field Name	Details
`State`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The state of the WorkGoal object. Applies only to WorkGoal objects of `Type`: Metric. Possible values: • Draft: the draft state for the WorkGoal • Published: published state for the WorkGoal • Archived: archived state for the WorkGoal (for example, goals that no longer apply)
`TargetValue`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The target value of the WorkGoal. Applies only to WorkGoal objects of `Type`: Metric.
`Type`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of the WorkGoal object, used to differentiate between the components of a goal. (This field is used to represent components of a goal such as its description and associated metrics.) Possible values: • Goal: a goal • Metric: a metric (typically associated with goals) • Objective: an objective • KeyResult: a key result (typically associated with objectives • V2Mom: a V2MOM (pilot feature) • Vision: a vision (pilot feature — typically associated with V2MOM) • Value: a value (pilot feature - typically associated with V2MOM) • Method: a method (pilot feature - typically associated with V2MOM) • Obstacle: an obstacle (pilot feature - typically associated with V2MOM) • Measure: a measure (pilot feature - typically associated with a method)

Field Name	Details
	Note: Administrators can rename goals and metrics to objectives and key results, respectively. If this preference is enabled, use the `Type` Objective or KeyResult. Otherwise, use the default `Type` Goal or KeyResult.
`Weight`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The weight of the goal or metric. The sum of the weights should equal 100%.

WorkGoalCollaborator

Represents collaborators on a WorkGoal object. This doesn't include WorkGoal followers, which is handled by Chatter Feed Follow functionality. This object has been deprecated as of API version 35.0. Use the Goal object to query information about Work.com goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`InvitationDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The date that a user was invited to become a collaborator (nill if the user was not invited).
`State`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update **Description** Indicates the state of the collaborating user. Whether the user has not responded, joined, or declined collaboration. The possible values are:

Field Name	Details
	• PendingResponse: a user who was invited to collaborate but hasn't joined or declined • Joined: a user who is collaborating on a goal (joined/commit) • Declined: a user who declined to collaborate on a goal
`UserId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The collaborating user.
`WorkGoalId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The WorkGoal object that this collaborator is a part of.

WorkGoalCollaboratorHistory

Represents the history of changes to the values in the fields in a WorkGoalCollaborator object. Access is read-only.

Note: This object has been deprecated as of API version 35.0. Use the Goal object to query information about Work.com goals in API version 35.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Name of the standard or custom field.

Field Name	Details
NewValue	**Type** anyType **Properties** Nillable, Sort **Description** New value of the modified field.
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** Previous value of the modified field.
WorkGoalCollaboratorId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the WorkGoalCollaborator object that is associated with this history entry.

WorkGoalFeed

Represents a single feed item in the feed displayed on the goal page for a Goal record. The goal feed shows changes to a goal for fields that are tracked in feeds, posts, and comments about the goal, and updates on metrics. This object has been deprecated as of API version 35.0. Use the GoalFeed object to query information about feed items for Work.com goals.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Body	**Type** textarea **Properties** Nillable, Sort

Field Name	Details
	Description The content of the FeedItem. Required when Type is TextPost. Optional when Type is ContentPost or LinkPost. This field is the message that appears in the feed.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can’t be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in ContentData.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The file uploaded to the feed. Required if Type is ContentPost. The name of the file uploaded to the feed. Setting ContentFileName automatically sets Type to ContentPost.
`ContentSize`	**Type** int

Field Name	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates multiple posts and comments from another application into a feed, then InsertedById is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item `Body` contains rich text. Set `IsRichText` to `true` if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • `<p>` Tip: Though the ` ` tag isn't supported, you can use `<p> </p>` to create lines. • `<b>` • `<code>` • `<i>`

Field Name	Details
	- `<u>` - `<s>` - `<ul>` - `<ol>` - `<li>` - `<img>` The `<img>` tag is accessible only via the API and must reference files in Salesforce similar to this example: `<img src="sfdc://069B0000000omjh"></img>` Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a LinkPost.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. If Salesforce Communities is enabled for your organization, this field is available in API version 28.0 and later. `NetworkScope` can have the following values: - `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. - `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`:

Field Name	Details
	• Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
`ParentId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the goal record that is tracked in the feed. The feed is displayed on the detail page for this record.
`RelatedRecordId`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a ContentPost. This field is null for all posts except ContentPost. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of TypeContentPost.
`Title`	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the Type is LinkPost, the LinkUrl is the URL and this field is the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email

Field Name	Details
	tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used. • `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event.

Field Name	Details
	• `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status. • `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The visibility of a FeedItem: • AllUsers: visible to all users • InternalUsers: visible to internal users

WorkGoalHistory

Represents the history of changes to the values in the fields of a WorkGoal. Access is read-only. This object has been deprecated as of API version 35.0. Use the GoalHistory object to query historical information for Work.com goals.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The name of the field that was changed.
`NewValue`	**Type** Any Type **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** Any Type **Properties** Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkGoalId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the Goal. Label is Goal ID.

WorkGoalLink

Represents the relationship between two goals (many to many relationship). This object has been deprecated as of API version 35.0. Use the GoalLink object to query information about the relationship between two Work.com goals.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()` ,`upsert()`

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the WorkGoalLink is active (`true`) or not (`false`)
`LinkType`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The type of link
`Name`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** The auto-generated name of the goal link
`SourceGoalId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the source WorkGoal object
`TargetGoalId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** The ID of the target WorkGoal object

WorkGoalShare

Represents a sharing entry on a WorkGoal object. This object has been deprecated as of API version 35.0. Use the GoalShare object to query information about sharing for Work.com goals.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the goal. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records This field must be set to an access level that is higher than the organization's default access level for goals.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkGoal object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.

Field Name	Details
	Valid values include: • Owner: User is the owner of the WorkGoal or is in a user role above the WorkGoal owner in the role hierarchy. • Manual: User or group has access, because a user with “All” access manually shared the WorkGoal with the user or group. • Rule: User or group has access via a WorkGoal sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the goal. This field can’t be updated.

WorkOrder

Represents field service work to be performed for a customer. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
AccountId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The account associated with the work order.
Address	**Type** address **Properties** Filter, Nillable

Field Name	Details
	Description The compound form of the address where the work order is completed.
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the work order.
`BusinessHoursId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The business hours associated with the work order.
`CaseId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The case associated with the work order.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the work order is completed. Maximum length is 40 characters.
`ContactId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The contact associated with the work order.
`Country`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The country where the work order is completed. Maximum length is 80 characters.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work order. Try to include the steps needed to change the work order's status to Completed.
`Discount`	**Type** percent **Properties** Filter, Nillable, Sort **Description** Read only. The weighted average of the discounts on all line items in the work order. It can be any positive number up to 100.
`Duration`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated time required to complete the work order. Specify the duration unit in the `Duration Type` field. Note: Work order duration and work order line item duration are independent of each other. If you want work order duration to automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.
`DurationType`	**Type** picklist

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the duration: Minutes or Hours.
`EndDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the work order is completed. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the `EndDate` to 365 days after the `StartDate`.
`EntitlementId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The entitlement associated with the work order.
`GeocodeAccuracy`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Accuracy level of the geocode for the address. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
`GrandTotal`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total price of the work order with tax added.
`IsClosed`	**Type** boolean **Properties** Group, Defaulted on create, Filter, Sort

Field Name	Details
	Description Indicates whether the work order is closed (`true`) or open (`false`). Tip: Use this field to report on closed versus open work orders.
`IsGeneratedFromMaintenancePlan`	**Type** boolean **Properties** Group, Defaulted on create, Filter, Sort **Description** (Read Only) Indicates that the work order was generated from a maintenance plan (`true`), rather than manually created (`false`). Note: This option is deselected for work orders that were generated from maintenance plans before Summer '18.
`IsStopped`	**Type** boolean **Properties** Group, Defaulted on create, Create, Filter, Sort, Update **Description** Indicates whether a milestone is paused (`true`) or counting down (`false`). This field is available only if **Enable stopped time and actual elapsed time** is selected on the Entitlement Settings page.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work order was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work order was last viewed.
`Latitude`	**Type** double

Field Name	Details
	Properties Create, Filter, Nillable, Sort, Update **Description** Used with Longitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
`LineItemCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of work order line items in the work order. Its label in the user interface is `Line Items`.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with Latitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. See Compound Field Considerations and Limitations for details on geolocation compound fields. Note: This field is available in the API only.
`MaintenancePlanId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The maintenance plan associated with the work order. When the work order is auto-generated from a maintenance plan, this field automatically lists the related plan.
`MilestoneStatus`	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description Indicates the status of a milestone. This field is visible if an entitlement process is applied to a work order.
`MinimumCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the work order. If you're not using the Field Service Lightning managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a work order's minimum crew size requirement.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The work order's assigned owner.
`ParentWorkOrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work order's parent work order, if it has one. Tip: Create a custom report to view a work order's child work orders.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the work order is completed. Maximum length is 20 characters.
`Pricebook2Id`	**Type** reference

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The price book associated with the work order. Adding a price book to the work order lets you assign different price book entries to the work order's line items. This is only available if Product2 is enabled.
`Priority`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The priority of the work order. The picklist includes the following values, which can be customized: • `Low` • `Medium` • `High` • `Critical`
`RecommendedCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the work order. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3.
`ReturnOrder`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the work order.
`ReturnOrderLineItem`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The return order line item associated with the work order.

Field Name	Details
RootWorkOrderId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level work order in a work order hierarchy. Depending on where a work order lies in the hierarchy, its root could be the same as its parent. Note: View a work order's child work order in the Child Work Orders related list.
ServiceAppointmentCount	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The number of service appointments on the work order.
ServiceContractId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service contract associated with the work order.
ServiceReportTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template that the work order uses. If you don't specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template.
ServiceTerritoryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service territory where the work order is taking place.

Field Name	Details
SlaExitDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time that the work order exits the entitlement process.
SlaStartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Update, Sort **Description** The time that the work order enters the entitlement process. You can update or reset the time if you have "Edit" permission on work orders.
StartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when the work order goes into effect. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the StartDate to the date when the Status changes to In Progress.
State	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the work order is completed. Maximum length is 80 characters.
Status	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the work order. The picklist includes the following values, which can be customized: • *New*—Work order was created, but there hasn't yet been any activity. • *In Progress*—Work has begun. • *On Hold*—Work is paused.

Field Name	Details
	• *Completed*—Work is complete. • *Cannot Complete*—Work could not be completed. • *Closed*—All work and associated activity is complete. • *Canceled*—Work is canceled, typically before any work began. Changing a work order's status does not affect the status of its work order line items or associated service appointments.
StatusCategory	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each Status value falls into. The Status Category field has eight default values: seven values which are identical to the default Status values, and a None value for statuses without a status category. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *Waiting for Response* value, you may decide that it belongs in the *On Hold* category. The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.
StopStartDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** Indicates when the milestone was paused. The label in the user interface is Stopped Since.
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the work order is completed.
Subject	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update

Field Name	Details
	Description The subject of the work order. Try to describe the nature and purpose of the job to be completed. For example, "Annual On-Site Well Maintenance." Maximum length is 255 characters.
`Subtotal`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total of the work order line items' subtotals before discounts and taxes are applied.
`SuggestedMaintenanceDate`	**Type** date **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The suggested date that the work order is completed. When the work order is auto-generated from a maintenance plan, this field is automatically populated based on the maintenance plan's settings.
`Tax`	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** The total tax on the work order. You can enter a number with or without the currency symbol and use up to two decimal places. For example, in a work order whose total price is $100, enter $10 to apply a 10% tax.
`TotalPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The total of the work order line items' prices. This value has discounts applied but not tax.
`WorkOrderNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort

Field Name	Details
	Description An eight-digit, auto-generated number that identifies the work order.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the work order. When a work type is selected, the work order automatically inherits the work type's `Duration`, `Duration Type`, and required skills.

WorkOrderFeed

Represents a single feed item on a work order record detail page. This object is available in API version 36.0 and later.

A work order feed shows changes to tracked fields on a work order record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to work orders in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Work orders or Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Work Order object
- "Moderate Chatter"

> **Note:** Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort

Field Name	Details
	Description The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or`LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization. When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description Available in API version 36.0 and earlier only. The name of the file to upload to the feed. Required if `Type` is `ContentPost`. Setting this field sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. The size of the file uploaded to the feed in bytes. Determined during insert.
`ContentType`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. The MIME type of the file uploaded to the feed. Determined during insert.
`InsertedById`	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
`IsRichText`	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
`LikeCount`	**Type** int **Properties** Filter, Group, Sort

Field Name	Details
	Description The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work order record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a content post. This field is null for all posts, except ContentPost.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the Type is LinkPost, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

WorkOrderHistory

Represents the history of changes made to tracked fields on a work order. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Work orders or Field Service Lightning must be enabled in your organization, and field tracking for work order fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`WorkOrderId`	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the work order being tracked. The history is displayed on the detail page for this record.

WorkOrderLineItem

Represents a subtask on a work order in field service. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`Address`	**Type** address **Properties** Filter, Nillable **Description** The compound form of the address where the line item is completed.
`AssetId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The asset associated with the work order line item. The asset is not automatically inherited from the parent work order.
`City`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The city where the line item is completed. Maximum length is 40 characters.
`Country`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, Nillable, Sort, Update **Description** The country where the line item is completed. Maximum length is 80 characters.
`CurrencyIsoCode`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** Available only for orgs with the multicurrency feature enabled. Contains the ISO code for any currency allowed by the organization. The label in the user interface is `Currency ISO Code`.
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work order line item. Try to describe the steps needed to mark the line item Completed.
`Discount`	**Type** percent **Properties** Create, Filter, Nillable, Sort, Update **Description** The percent discount to apply to the line item. You can enter a number with or without the percent symbol, and you can use up to two decimal places.
`Duration`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** The estimated time required to complete the line item. Specify the duration unit in the `Duration Type` field. Note: Work order duration and work order line item duration are independent of each other. If you want work order duration to automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.

Field Name	Details
DurationType	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The unit of the duration: Minutes or Hours.
EndDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date on which the line item is completed. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create a quick action that sets the EndDate to 365 days after the StartDate.
GeocodeAccuracy	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The level of accuracy of a location's geographical coordinates compared with its physical address. Usually provided by a geocoding service based on the address's latitude and longitude coordinates. Note: This field is available in the API only.
IsClosed	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the line item has been closed. Changing the line item's status to `Closed` causes this checkbox to be selected in the user interface (sets `IsClosed` to `true`). Tip: Use this field to report on closed versus open work order line items.
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort

Field Name	Details
	Description The date when the line item was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the line item was last viewed.
`Latitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Used with `Longitude` to specify the precise geolocation of the address where the line item is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. Note: This field is available in the API only.
`LineItemNumber`	**Type** string **Properties** Autonumber, Defaulted on create, Filter, idLookup, Sort **Description** An auto-generated number that identifies the work order line item. Each work order's line items start at 1.
`ListPrice`	**Type** currency **Properties** Filter, Nillable, Sort **Description** The price of the line item (product) as listed in its corresponding price book entry. If a price book entry isn't specified, the list price defaults to zero.
`Longitude`	**Type** double **Properties** Create, Filter, Nillable, Sort, Update

Field Name	Details
	Description Used with `Latitude` to specify the precise geolocation of the address where the line item is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places. Note: This field is available in the API only.
`MinimumCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the line item. If you're not using the Field Service Lightning managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a work order line item's minimum crew size requirement.
`OrderId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The order associated with the line item. For example, you may need to order replacement parts before you can complete the line item.
`ParentWorkOrderLineItemId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The line item's parent work order line item, if it has one. Tip: Create a custom report to view a line item's child line items.
`PostalCode`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The postal code where the line item is completed. Maximum length is 20 characters.

Field Name	Details
PricebookEntryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The price book entry (product) associated with the line item. The label in the user interface is `Product`. This field's lookup search only returns products that are included in the work order's price book.
Product2Id	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The product associated with the price book entry. This field is not available in the user interface. For best results, use the `PricebookEntryId` field in any custom code or layouts.
Quantity	**Type** double **Properties** Create, Filter, Nillable, Sort, Update **Description** Number of units of the line item included in the associated work order.
RecommendedCrewSize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the line item. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3.
ReturnOrder	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The return order associated with the work order line item.

Field Name	Details
ReturnOrderLineItem	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The return order line item associated with the work order line item.
RootWorkOrderLineItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** (Read only) The top-level line item in a work order line item hierarchy. Depending on where a line item lies in the hierarchy, its root could be the same as its parent. Note: View a line item's child line items in the Child Work Order Line Items related list.
ServiceReportTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template that the line item uses. If you don't specify a service report template on a work order line item, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the line item uses the default service report template.
ServiceTerritoryId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service territory where the line item is completed.
StartDate	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date on which the line item goes into effect. This field is blank unless you set up an Apex trigger or quick action to populate it. For example, you can create

Field Name	Details
	a quick action that sets the StartDate to the date when the Status changes to In Progress.
`State`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The state where the line item is completed. Maximum length is 80 characters.
`Status`	**Type** picklist **Properties** Create, Defaulted on create, Filter, Group, Nillable, Sort, Update **Description** The status of the line item. The picklist includes the following values, which can be customized: • `New`—Line item was created, but there hasn't yet been any activity. • `In Progress`—Work has begun. • `On Hold`—Work is paused. • `Completed`—Work is complete. • `Cannot Complete`—Work could not be completed. • `Closed`—All work and associated activity is complete. • `Canceled`—Work is canceled, typically before any work began.
`StatusCategory`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The category that each `Status` value falls into. The `Status Category` field has eight default values: seven values which are identical to the default `Status` values, and a `None` value for statuses without a status category. If you create custom `Status` values, you must indicate which category it belongs to. For example, if you create a *`Waiting for Response`* value, you may decide that it belongs in the *`On Hold`* category. The `Status Category` field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.

Field Name	Details
Street	**Type** textarea **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The street number and name where the line item is completed.
Subject	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** A word or phrase describing the line item.
Subtotal	**Type** currency **Properties** Filter, Nillable, Sort **Description** (Read only) The line item's unit price multiplied by the quantity.
TotalPrice	**Type** currency **Properties** Filter, Nillable, Sort **Description** Read only. The line item's subtotal with discounts applied.
UnitPrice	**Type** currency **Properties** Create, Filter, Nillable, Sort, Update **Description** Initially, the unit price for a work order line item is the line item's list price from the price book, but you can change it.
WorkOrderId	**Type** reference **Properties** Create, Filter, Group, Sort

Field Name	Details
	Description The line item's parent work order. Because work order line items must be associated with a work order, this is a required field.
`WorkTypeId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The work type associated with the line item. When a work type is selected, the line item automatically inherits the work type's `Duration`, `Duration Type`, and required skills.

Usage

A work order line item is a child record of a work order. It represents a specific subtask on a work order.

For example, suppose a customer purchased a truck from you. The truck is represented as an asset in your Salesforce org. After some time, the truck needs both headlight bulbs replaced. Here's one way that you can use work orders and work order line items to track the repair.

1. Create a work order named "Replace Headlight Bulbs" from the asset record detail page.
2. Add three work order line items to the work order: "Replace Left Headlight Bulb," "Replace Right Headlight Bulb," and "Test Headlights."
3. Assign the work order to a technician via a queue.
4. As the technician completes each line item, he or she marks the item `Completed`.
5. When all the line items are complete, the technician marks the work order `Completed`.

WorkOrderLineItemFeed

Represents a single feed item on a work order line item record detail page. This object is available in API version 36.0 and later.

A work order line item feed shows changes to tracked fields on a work order line item record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to work order line items in Salesforce.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Work orders or Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"

- "Modify All" on the Work Order Line Item object
- "Moderate Chatter"

Note: Users with the "Moderate Chatter" permission can delete only the feed items and comments they see.

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.
`CommentCount`	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
`ConnectionId`	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** The ID of the PartnerNetworkConnection. Available if Salesforce to Salesforce is enabled for your organization. When a PartnerNetworkConnection modifies a record that is tracked, the `CreatedBy` field contains the ID of the system administrator.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.

Field Name	Details
ContentDescription	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
ContentFileName	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. The name of the file to upload to the feed. Required if `Type` is `ContentPost`. Setting this field sets `Type` to `ContentPost`.
ContentSize	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. The size of the file uploaded to the feed in bytes. Determined during insert.
ContentType	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. The MIME type of the file uploaded to the feed. Determined during insert.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.

Field Name	Details
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work order line item record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort

Field Name	Details
	Description The title of the feed item. When `Type` = `LinkPost`, Link URL= the link URL and `Title` = the link name.
`Type`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

WorkOrderLineItemHistory

Represents the history of changes made to tracked fields on a work order line item. This object is available in API version 36.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Work orders or Field Service Lightning must be enabled in your organization, and field tracking for work order line item fields must be configured.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.

Field Name	Details
OldValue	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
WorkOrderLineItemId	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work order line item being tracked. The history is displayed on the detail page for this record.

WorkOrderLineItemStatus

Represents a possible status of a work order line item in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
ApiName	**Type** string **Properties** Filter, Group, Sort **Description** The API name of the status value.
IsDefault	**Type** boolean

Field Name	Details
	Properties Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on work orders. Only one status value can be the default.
`MasterLabel`	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
`SortOrder`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
`StatusCode`	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on work order line items comes with the following values:

- New—Line item was created, but there hasn't yet been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.
- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The WorkOrderLineItemStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Customer—creates a work order line item status record, and vice versa.

Note: Work order line items also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *`Customer Absent`* value, you may decide that it belongs in the *`Cannot Complete`* category.

The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.

WorkOrderShare

Represents a sharing entry on a work order. This object is available in API version 36.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Work orders or Field Service Lightning must be enabled in your organization. Community users can't access this object.

Fields

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the work order. The possible values are: • *`Read`* • *`Edit`* • *`All`* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default work order access level.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work order associated with the sharing entry.

Field Name	Details
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to `Manual` (default). Valid values include: • `Manual`—The user or group has access because a user with "All" access manually shared the work order. • `Owner`—The user is the owner of the work order. • `Team`—The user or group has team access. • `Rule`—The user or group has access via a work order sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read Only) ID of the user or group that has access to the work order.

WorkOrderStatus

Represents a possible status of a work order in field service.

Supported Calls

`describeSObjects()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
ApiName	**Type** string **Properties** Filter, Group, Sort

Field Name	Details
	Description The API name of the status value.
IsDefault	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates that the status value is the default status on work orders. Only one status value can be the default.
MasterLabel	**Type** string **Properties** Filter, Group, Nillable, Sort **Description** The label for the picklist value that appears in the UI.
SortOrder	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** The value's position in the drop-down list of values in the UI.
StatusCode	**Type** picklist **Properties** Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The status category that the value corresponds to. The Status Category field has seven values which are identical to the default Status values.

Usage

The Status field on work orders comes with the following values:

- New—Work order was created, but there hasn't yet been any activity.
- In Progress—Work has begun.
- On Hold—Work is paused.
- Completed—Work is complete.
- Cannot Complete—Work could not be completed.

- Closed—All work and associated activity is complete.
- Canceled—Work is canceled, typically before any work began.

The WorkOrderStatus object corresponds to the Status field. Adding a value to the Status field—for example, Canceled By Customer—creates a work order status record, and vice versa.

Note: Work orders also come with a StatusCategory field whose values are identical to the default Status values. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a *Customer Absent* value, you may decide that it belongs in the *Cannot Complete* category.

The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management.

WorkPerformanceCycle

Represents feedback that is gathered to assess the performance of a specific set of employees.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`ActivityFrom`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date that you want to start filtering the work.com objects to help requesters create accurate summaries. The start of the evaluation period.
`ActivityTo`	**Type** date **Properties** Create, Filter, Group, Sort, Update **Description** The date that you want to stop filtering the work.com objects to help requesters create accurate summaries. The end of the evaluation period.
`CurrentTask`	**Type** picklist

Field Name	Details
	Properties Filter, Group, Nillable, Restricted picklist, Sort **Description** The current task that the performance summary cycle is engaged in, including deploying and sharing.
`LastManagerRequestsSharedDate`	**Type** dateTime **Properties** Create, Filter, Nillable, Sort, Update **Description** The date when all manager requests are set to be shared.
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkPerformanceCycle.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkPerformanceCycle. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the performance summary cycle that employees will participate in. This name is created by the administrator and is visible on all respective notifications and in the UI.
`OwnerId`	**Type** reference

Field Name	Details
	Properties Create, Defaulted on create, Filter, Group, Sort, Update **Description** ID of the owner of the WorkPerformanceCycle.
`State`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The state that the performance summary cycle is in. Available pick list values: • Setup: The summary is in draft. • In Progress: The summary is deployed and people are answering the questions that were created. • Finished: The summary is no longer in progress. • Error: The summary encountered an error.

WorkPerformanceCycleFeed

Represents a single feed item in the feed that is displayed on a Work.com Performance detail page.

Supported Calls

`delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The content of the FeedItem. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`. This field is the message that appears in the feed.
`CommentCount`	**Type** int

Field Name	Details
	Properties Filter, Group, Sort **Description** The number of FeedComments associated with this feed item.
`ContentData`	**Type** base64 **Properties** Nillable **Description** Available in API version 36.0 and earlier only. Required if `Type` is `ContentPost`. Encoded file data in any format, and can't be 0 bytes. Setting this field automatically sets `Type` to `ContentPost`.
`ContentDescription`	**Type** textarea **Properties** Nillable, Sort **Description** Available in API version 36.0 and earlier only. The description of the file specified in `ContentData`.
`ContentFileName`	**Type** string **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. This field is required if `Type` is `ContentPost`. The name of the file uploaded to the feed. Setting `ContentFileName` automatically sets `Type` to `ContentPost`.
`ContentSize`	**Type** int **Properties** Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The size of the file (in bytes) uploaded to the feed.
`ContentType`	**Type** string

Field Name	Details
	Properties Group, Nillable, Sort **Description** Available in API version 36.0 and earlier only. Read only. Automatically determined during insert. The MIME type of the file uploaded to the feed.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if a client application migrates multiple posts and comments from another application into a feed, then InsertedById is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Indicates whether the feed item Body contains rich text. Set IsRichText to true if you post a rich text feed item via SOAP API. Otherwise, the post is rendered as plain text. Rich text supports the following HTML tags: • <p> Tip: Though the tag isn't supported, you can use <p> </p> to create lines. • <b> • <code> • <i> • <u> • <s> • • • • <img> The <img> tag is accessible only via the API and must reference files in Salesforce similar to this example: <img src="sfdc://069B0000000omjh"></img>

Field Name	Details
	Note: In API version 35.0 and later, the system replaces special characters in rich text with escaped HTML. In API version 34.0 and prior, all rich text appears as a plain-text representation.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of FeedLikes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a `LinkPost`.
NetworkScope	**Type** picklist **Properties** Group, Nillable, Restricted picklist, Sort **Description** Specifies whether this feed item is available in the default community, a specific community, or all communities. If Salesforce Communities is enabled for your organization, this field is available in API version 30.0 and later. `NetworkScope` can have the following values: • `NetworkId`—The ID of the community in which the FeedItem is available. If left empty, the feed item is only available in the default community. • `AllNetworks`—The feed item is available in all communities. Note the following exceptions for `NetworkScope`: • Only feed items with a Group or User parent can set a `NetworkId` or a null value for `NetworkScope`. • For feed items with a record parent, users can set `NetworkScope` only to `AllNetworks`. • You can't filter a FeedItem on the `NetworkScope` field.
ParentId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the group that is tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the ContentVersion object associated with a `ContentPost`. This field is null for all posts except `ContentPost`. For example, set this field to an existing ContentVersion and post it to a feed as a FeedItem object of `Type ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the FeedItem. When the `Type` is `LinkPost`, the `LinkUrl` is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item. Except for `ContentPost`, `LinkPost`, and `TextPost`, don't create feed item types directly from the API. • `ActivityEvent`—indirectly generated event when a user or the API adds a Task associated with a feed-enabled parent record (excluding email tasks on cases). Also occurs when a user or the API adds or updates a Task or Event associated with a case record (excluding email and call logging). For a recurring Task with CaseFeed disabled, one event is generated for the series only. For a recurring Task with CaseFeed enabled, events are generated for the series and each occurrence. • `AdvancedTextPost`—created when a user posts a group announcement and, in Lightning Experience as of API version 39.0 and later, when a user shares a post. • `AnnouncementPost`—Not used. • `ApprovalPost`—generated when a user submits an approval. • `BasicTemplateFeedItem`—Not used.

Field Name	Details
	• `CanvasPost`—a post made by a canvas app posted on a feed. • `CollaborationGroupCreated`—generated when a user creates a public group. • `CollaborationGroupUnarchived`—Not used. • `ContentPost`—a post with an attached file. • `CreatedRecordEvent`—generated when a user creates a record from the publisher. • `DashboardComponentAlert`—generated when a dashboard metric or gauge exceeds a user-defined threshold. • `DashboardComponentSnapshot`—created when a user posts a dashboard snapshot on a feed. • `LinkPost`—a post with an attached URL. • `PollPost`—a poll posted on a feed. • `ProfileSkillPost`—generated when a skill is added to a user's Chatter profile. • `QuestionPost`—generated when a user posts a question. • `ReplyPost`—generated when Chatter Answers posts a reply. • `RypplePost`—generated when a user creates a Thanks badge in Work.com. • `TextPost`—a direct text entry on a feed. • `TrackedChange`—a change or group of changes to a tracked field. • `UserStatus`—automatically generated when a user adds a post. Deprecated. The following values appear in the `Type` picklist for all feed objects but apply only to CaseFeed: • `AttachArticleEvent`—generated event when a user attaches an article to a case. • `CallLogPost`—generated event when a user logs a call for a case through the user interface. CTI calls also generate this event. • `CaseCommentPost`—generated event when a user adds a case comment for a case object. • `ChangeStatusPost`—generated event when a user changes the status of a case. • `ChatTranscriptPost`—generated event when Live Agent transcript is saved to a case. • `EmailMessageEvent`—generated event when an email related to a case object is sent or received. • `FacebookPost`—generated when a Facebook post is created from a case. Deprecated. • `MilestoneEvent`—generated when a case milestone is completed or reaches violation status.

Field Name	Details
	• `SocialPost`—generated when a social post is created from a case.
`Visibility`	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The visibility of a FeedItem: • AllUsers: visible to all users • InternalUsers: visible to internal users

WorkPerformanceCycleHistory

Represents the history of changes to the values in the fields of a WorkPerformanceCycle object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The latest value of the field before it was changed.
`WorkPerformanceCycleId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the WorkPerformanceCycle.

WorkPerformanceCycleShare

Represents a sharing entry on a WorkPerformanceCycle object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the work performance cycle. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for work performance cycles.

Field Name	Details
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the WorkPerformanceCycle object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkPerformanceCycle or is in a user role above the WorkPerformanceCycle owner in the role hierarchy. • Manual: User or group has access, because a user with “All” access manually shared the WorkPerformanceCycle with the user or group. • Rule: User or group has access via a WorkPerformanceCycle sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID of the user or group that was given access to the performance cycle share. This field can’t be updated.

WorkReward

Used to store reward codes tied to a Reward Fund. Reward Funds must have at least one WorkReward record.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

You must have the Reward permission enabled in order to use the Rewards feature, including WorkRewardFund and WorkReward.

Additional Considerations and Related Objects

WorkReward is a lookup to WorkRewardFund. WorkRewardFund must have at least one WorkReward record to be available for use. Each WorkBadge record with a `RewardId` indicates a reward badge given to a Recipient.

Fields

Field Name	Details
`Code`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** Represents a singe reward code tied to a RewardFundId.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Represents the User ID of Owner of WorkReward record
`RecipientId`	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** Salesforce User ID for User associated with this WorkReward record.
`RedemptionDisclaimer`	**Type** textarea **Properties** Nillable **Description** The disclaimer information about the WorkReward.
`RedemptionInfo`	**Type** textarea

Field Name	Details
	Properties Nillable **Description** The instructions for redeeming the WorkReward.
`RedemptionUrl`	**Type** textarea **Properties** Nillable **Description** The URL for redeeming the WorkReward.
`RewardFundId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID for WorkRewardFund record that is associated with WorkReward record.
`RewardFundTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID of the WorkRewardFundType associated with the WorkReward.
`Value`	**Type** double **Properties** Filter, Nillable, Sort **Description** The value of the WorkReward.

WorkRewardFund

Represents a Reward Fund and describes the Reward Fund attributes.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

To use the Rewards feature, including WorkRewardFund and WorkReward, you must have the Reward permission enabled. To create Rewards, the user must have Create on WorkRewardFund, which is not a standard permission.

Additional Considerations and Related Objects

WorkReward is a lookup to WorkRewardFund. WorkRewardFund must have at least one WorkReward record available. Each WorkBadgeDefinition with a RewardFundId is a "Reward Badge."

Fields

Field Name	Details
`IsActive`	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Indicates whether the WorkRewardFund is active (`true`) or not (`false`).
`LastReferencedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkRewardFund.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkRewardFund. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
`Name`	**Type** string

Field Name	Details
	Properties Create, Filter, Group, idLookup, Sort, Update **Description** Required. Name of the Reward Fund.
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce unique ID of User who is the Owner of the WorkRewardFund record.
`RewardFundTypeId`	**Type** reference **Properties** Create, Filter, Group, Sort, Update **Description** Salesforce unique ID of the WorkRewardFundType that is associated with the WorkRewardFund.
`TotalCodeCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total reward codes that are available in the WorkRewardFund. Derived from WorkReward records that are associated with the WorkRewardFund.
`Type`	**Type** string **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** RewardType of the WorkRewardFund. Default is Amazon.com.
`UsedCodeCount`	**Type** int **Properties** Filter, Group, Nillable, Sort **Description** Total reward codes that are used in the WorkRewardFund. Derived from the total assigned WorkReward records that are associated with the WorkRewardFund.

Field Name	Details
Value	**Type** currency **Properties** Create, Filter, Sort, Update **Description** Value of each of the reward codes in the WorkRewardFund.

WorkRewardFundHistory

Represents the history of changes to the values in the fields of a WorkRewardFund object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
Field	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Type of change (e.g., created).
NewValue	**Type** Any Type **Properties** Nillable, Sort **Description** Updated value of record.
OldValue	**Type** Any Type **Properties** Nillable, Sort **Description** Previous value of record.

Field Name	Details
`WorkRewardFundId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of WorkRewardFund record.

WorkRewardFundShare

Share records for WorkRewardFund.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** CRUD Access Level (picklist values: Read Only, Read/Write, Owner).
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for WorkRewardFund record.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description Owner or Manual sharing. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** User or Group ID for WorkRewardFund record.

WorkRewardFundType

Represents the type of WorkRewardFund object.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`,`undelete()`, `update()`, `upsert()`

Fields

Field Name	Details
`CreditSystem`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The credit system that is used by the WorkRewardFundType object (gift codes or points). If points are selected, the reward message will not consider the `CurrencyCode` field.
`CurrencyCode`	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort, Update **Description** The currency code of the WorkRewardFundType

Field Name	Details
IsActive	**Type** boolean **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Whether the WorkRewardFundType is active and available in the UI
IsPredefined	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** Whether the WorkRewardFundType is predefined (`true`) or not (`false`)
LastReferencedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed a record that is related to this WorkRewardFundType.
LastViewedDate	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The time stamp that indicates when the current user last viewed this WorkRewardFundType. If this value is null, this record might have been only referenced (`LastReferencedDate`) and not viewed.
Name	**Type** string **Properties** Create, Filter, Group, idLookup, Sort, Update **Description** The name of the WorkRewardFundType
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update

Field Name	Details
	Description The ID of the WorkRewardFundType owner
`RedemptionDisclaimer`	**Type** textarea **Properties** Create, Nillable, Update **Description** The redemption disclaimer text for the WorkRewardFundType
`RedemptionInfo`	**Type** textarea **Properties** Create, Nillable, Update **Description** Redemption text for the WorkRewardFundType
`RedemptionUrl`	**Type** textarea **Properties** Create, Nillable, Update **Description** The URL that's linked to the redemption
`UploadCodeColumn`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The column where the reward code is contained in the CSV file. The upload uses the second value by default.
`UploadValueColumn`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The column where the reward value is contained in the CSV file. The upload uses the third column by default.

WorkRewardFundTypeHistory

Represents the history of changes to the values in the fields of a WorkRewardFundType object.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the changed field
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed
`WorkRewardFundTypeId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the WorkRewardFundType

WorkRewardFundTypeShare

Represents a sharing entry on a WorkRewardFundType.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** The user's or group's level of access to the work reward fund type. The possible values are: • Read • Edit • All: This value is not valid when you create, update, or delete records. This field must be set to an access level that is higher than the organization's default access level for WorkRewardFundType objects.
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the WorkRewardFundType object that is associated with this sharing entry.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort

Field Name	Details
	Description The reason that this sharing entry exists. Read-only. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings. Valid values include: • Owner: User is the owner of the WorkRewardFundType or is in a user role above the WorkRewardFundType owner in the role hierarchy. • Manual: User or group has access, because a user with "All" access manually shared the WorkRewardFundType with the user or group. • Rule: User or group has access via a WorkRewardFundType sharing rule.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID of the user or group that was given access to the WorkRewardFundType. This field can't be updated.

WorkRewardHistory

Represents the history of changes to the fields of a WorkReward.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed
`NewValue`	**Type** anyType

Field Name	Details
	Properties Nillable, Sort **Description** The new value of the field that was changed
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The latest value of the field before it was changed
`WorkRewardId`	**Type** reference **Properties** Filter, Group, Sort **Description** The ID of the WorkReward

WorkRewardShare

Share records for WorkReward object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** CRUD Access Level (picklist values: Read Only, Read/Write, Owner).

Field Name	Details
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for WorkReward record.
RowCause	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Owner or Manual sharing. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** User or Group ID for WorkReward record.

WorkThanks

Represents the source and message of a thanks post.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `undelete()`, `update()`, `upsert()`

Additional Considerations and Related Objects

WorkBadge is a lookup to WorkThanks. Each WorkBadge record must derive a SourceId from WorkThanks.

Fields

Field Name	Details
FeedItemId	**Type** reference **Properties** Filter, Group, Nillable, Sort **Description** ID of the FeedItem related to the thanks badge.
GiverId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** Salesforce user ID for the giver of the Thanks record.
Message	**Type** textarea **Properties** Create **Description** Required. Message associated with the Thanks record.
NetworkId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The ID of the community that this WorkThanks is associated with. This field is available only if Salesforce Communities is enabled in your organization.
OwnerId	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** Salesforce user ID for the owner of the badge record (typically the same user as the giver of the record).

WorkThanksShare

Share records for WorkThanks object.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

The properties available for some fields depend on the default organization-wide sharing settings. The properties listed are true for the default settings of such fields.

Field Name	Details
`AccessLevel`	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** CRUD Access Level (picklist values: Read Only, Read/Write, Owner).
`ParentId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** ID for WorkThanks record.
`RowCause`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** Owner or Manual sharing. You can create a value for this field in API versions 32.0 and later with the correct organization-wide sharing settings.
`UserOrGroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** User or Group ID for WorkThanks record.

WorkType

Represents a type of work to be performed. Work types are templates that can be applied to work order or work order line items. This object is available in API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Description`	**Type** textarea **Properties** Create, Nillable, Update **Description** The description of the work type. Try to add details about the task or tasks that this work type represents.
`DurationType`	**Type** picklist **Properties** Create, Filter, Group, Defaulted on create, Restricted picklist, Sort, Update **Description** The unit of the `Estimated Duration`: Minutes or Hours.
`EstimatedDuration`	**Type** double **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The estimated length of the work. The estimated duration is in minutes or hours based on the value selected in the `Duration Type` field.
`LastReferencedDate`	**Type** dateTime

Field Name	Details
	Properties Filter, Nillable, Sort **Description** The date when the work type was last modified. Its label in the user interface is `Last Modified Date`.
`LastViewedDate`	**Type** dateTime **Properties** Filter, Nillable, Sort **Description** The date when the work type was last viewed by the current user.
`MinimumCrewSize`	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The minimum crew size allowed for a crew assigned to the work. Work orders and work order line items inherit their work type's minimum crew size. If you're not using the Field Service Lightning managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits the minimum crew size requirement.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update **Description** The name of the work type. Try to use a name that helps users quickly understand the type of work orders that can be created from the work type. For example, "Annual Refrigerator Maintenance" or "Valve Replacement."
`OwnerId`	**Type** reference **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The work type's owner.

Field Name	Details
RecommendedCrewSize	**Type** int **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The recommended number of people on the service crew assigned to the work. For example, you might have a Minimum Crew Size of 2 and a Recommended Crew Size of 3. Work orders and work order line items inherit their work type's recommended crew size.
ServiceReportTemplateId	**Type** reference **Properties** Create, Filter, Group, Nillable, Sort, Update **Description** The service report template associated with the work type. When users create service reports from a work order or work order line item that uses this work type, the reports will use this template.
ShouldAutoCreateSvcAppt	**Type** boolean **Properties** Create, Filter, Group, Defaulted on create, Sort, Update **Description** Select this option to have a service appointment automatically created on work orders and work order line items that use the work type. Note: • By default, the Due Date on auto-created service appointments is seven days after the created date. Admins can adjust this offset from the Field Service Settings page in Setup. • If a work type with the Auto-Create Service Appointment option selected is added to an existing work order or work order line item, a service appointment is only created for the work order or work order line item if it doesn't yet have one. • If someone updates an existing work type by selecting the Auto-Create Service Appointment option, service appointments aren't created on work orders and work order line items that were already using the work type.

Usage

Adding a work type to a work order or work order line item causes the record to inherit the work type's duration values and required skills and products.

Note:

- If needed, you can update the duration values and required skills and products on a work order or work order line item after they're inherited from the work type.
- If a work order or work order line item already has required skills or products, associating it with a work type doesn't cause it to inherit the work type's requirements.
- Customizations to required skills or products, such as validation rules or Apex triggers, are not carried over from work types to work orders and work order line items.

WorkTypeFeed

Represents a single feed item on a work type record detail page. This object is available in API version 38.0 and later.

A work type feed shows changes to tracked fields on a work type record. It also shows posts and comments about the record. It's a useful way to stay up to date with changes made to work types in Salesforce.

Supported Calls

`delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled in your organization, and you can delete all feed items you created. To delete feed items you didn't create, you must have one of these permissions:

- "Modify All Data"
- "Modify All" on the Operating Hours object
- "Moderate Chatter"

Fields

Field Name	Details
`Body`	**Type** textarea **Properties** Nillable, Sort **Description** The message that appears in the feed. Required when `Type` is `TextPost`. Optional when `Type` is `ContentPost` or `LinkPost`.

Field Name	Details
CommentCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of comments associated with this feed item.
InsertedById	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the user who added this object to the feed. For example, if an application migrates posts and comments from another application into a feed, the value is set to the ID of the logged-in user.
IsRichText	**Type** boolean **Properties** Defaulted on create, Filter, Group, Sort **Description** `true` indicates that the body of the feed contains rich text. `false` indicates that the post is rendered as plain text.
LikeCount	**Type** int **Properties** Filter, Group, Sort **Description** The number of feed likes associated with this feed item.
LinkUrl	**Type** url **Properties** Nillable, Sort **Description** The URL of a link post.
ParentId	**Type** reference **Properties** Filter, Group, Sort

Field Name	Details
	Description ID of the work type record tracked in the feed. The feed is displayed on the detail page for this record.
RelatedRecordId	**Type** reference **Properties** Group, Nillable, Sort **Description** ID of the `ContentVersion` object associated with a content post. This field is null for all posts, except `ContentPost`.
Title	**Type** string **Properties** Group, Nillable, Sort **Description** The title of the feed item. When the `Type` is `LinkPost`, the Link URL is the URL, and this field is the link name.
Type	**Type** picklist **Properties** Filter, Group, Nillable, Restricted picklist, Sort **Description** The type of feed item.

WorkTypeHistory

Represents the history of changes made to tracked fields on a work type. This object is available in API version 38.0 and later.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
`Field`	**Type** picklist **Properties** Filter, Group, Restricted picklist, Sort **Description** The name of the field that was changed.
`NewValue`	**Type** anyType **Properties** Nillable, Sort **Description** The new value of the field that was changed.
`OldValue`	**Type** anyType **Properties** Nillable, Sort **Description** The value of the field before it was changed.
`WorkTypeId`	**Type** reference **Properties** Filter, Group, Sort **Description** ID of the work type being tracked. The history is displayed on the detail page for this record.

WorkTypeOwnerSharingRule

Represents the rules for sharing a work type with user records other than the owner or anyone above the owner in the role hierarchy.

Note: To programmatically update owner sharing rules, we recommend that you use Metadata API. Contact Salesforce customer support to enable access to this object for your org.

Supported Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field	Details
`Description`	**Type** textarea **Properties** Create, Filter, Nillable, Sort, Update **Description** A description of the sharing rule. Maximum size is 1000 characters.
`DeveloperName`	**Type** string **Properties** Create, Defaulted on create, Filter, Group, Sort, Update **Description** The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to **Rule Name** in the user interface. Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance may slow while Salesforce generates one for each record.
`GroupId`	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the source group. A work type owned by a User in the source Group triggers the rule to give access.
`Name`	**Type** string **Properties** Create, Filter, Group, Sort, Update

Field	Details
	Description Label of the sharing rule as it appears in the user interface. Limited to 80 characters. Corresponds to **Label** on the user interface.
ServiceResourceAccessLevel	**Type** picklist **Properties** Create, Filter, Group, Restricted picklist, Sort, Update **Description** A value that represents the type of access granted to the target Group, or UserRole. The possible values are: • Read • Edit • All
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The ID representing the User or Group being granted access.

WorkTypeShare

Represents a sharing entry on a work type.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

Field Service Lightning must be enabled.

Fields

Field Name	Details
AccessLevel	**Type** picklist

Field Name	Details
	Properties Create, Filter, Group, Restricted picklist, Sort, Update **Description** Level of access that the user or group has to the work type. The possible values are: • *Read* • *Edit* • *All* (This value isn't valid for create or update calls.) Set to an access level that is at least equal to the organization's default work type access level.
ParentId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** The work type associated with the sharing entry.
RowCause	**Type** picklist **Properties** Create, Filter, Group, Nillable, Restricted picklist, Sort **Description** The reason why this sharing entry exists. You can write to this field only when its value is omitted or set to *Manual* (default). Valid values include: • *Manual*—The user or group has access because a user with "All" access manually shared the work type. • *Owner*—The user is the owner of the work type. • *Team*—The user or group has team access. • *Rule*—The user or group has access via a work type sharing rule.
UserOrGroupId	**Type** reference **Properties** Create, Filter, Group, Sort **Description** (Read only) ID of the user or group that has access to the work type.

CHAPTER 9 Core Calls

The following table lists supported calls in the API in alphabetical order, and provides a brief description for each. Click a call name to see syntax, usage, and more information for that call.

Note: For a list of API utility calls, see Utility Calls, and for a list of describe calls, see Describe Calls.

Call	Description
`convertLead()`	Converts a Lead into an Account, Contact, or (optionally) an Opportunity.
`create()`	Adds one or more new individual objects to your organization's data.
`delete()`	Deletes one or more individual objects from your organization's data.
`deleteByExample()` on page 2677	Deletes objects from your organization's data using an sObject as a template for what to delete. All data in a big object matching the values in the sObject templates are deleted.
`emptyRecycleBin()`	Delete records from the recycle bin immediately.
`findDuplicates()` on page 2686	Performs rule-based searches for duplicate records. The input is an array of sObject, each of which specifies the values to search for and the type of object that supplies the duplicate rules. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicates()` applies the rules to the values to do the search. The output identifies the detected duplicates for each sObject.
`getDeleted()`	Retrieves the IDs of individual objects of the specified object that have been deleted since the specified time. For information on IDs, see ID Field Type.
`getUpdated()`	Retrieves the IDs of individual objects of the specified object that have been updated since the specified time. For information on IDs, see ID Field Type.
`invalidateSessions()`	Ends one or more sessions specified by `sessionId`.
`login()`	Logs in to the login server and starts a client session.
`logout()`	Ends the session of the logged-in user.
`merge()`	Merges records of the same object type.
`process()`	Submits an array of approval process instances for approval, or processes an array of approval process instances to be approved, rejected, or removed.

Call	Description
`query()`	Executes a query against the specified object and returns data that matches the specified criteria.
`queryAll()`	Same as `query()`, but includes deleted and archived items.
`queryMore()`	Retrieves the next batch of objects from a query.
`retrieve()`	Retrieves one or more objects based on the specified object IDs.
`search()`	Executes a text search in your organization's data.
`undelete()`	Undelete records identified with `queryAll()`.
`update()`	Updates one or more existing objects in your organization's data.
`upsert()`	Creates new objects and updates existing objects; matches on a custom field to determine the presence of existing objects.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

`convertLead()`

Converts a Lead into an Account, Contact, or (optionally) an Opportunity.

Syntax

```
LeadConvertResult[] = connection.convertLead(leadConverts LeadConvert[]);
```

Usage

Use `convertLead()` to convert a Lead into an Account and Contact, as well as (optionally) an Opportunity. To convert a Lead, your client application must be logged in with the "Convert Leads" permission and the "Edit" permission on leads, as well as "Create" and "Edit" on the Account, Contact, and Opportunity objects.

This call provides an easy way to convert the information in a qualified lead to a new or updated account, contact, and opportunity. Your organization can set its own guidelines for determining when a lead is qualified, but typically, a lead can be converted as soon as it becomes a real opportunity that you want to forecast.

If data is merged into existing account, contact, and opportunity objects, then only empty fields in the target object are overwritten—existing data (including IDs) are not overwritten. The only exception to this is if your client application sets `overwriteLeadSource` to `true`, in which case the `LeadSource` field in the target Contact object will be overwritten with the contents of the `LeadSource` field in the source Lead object.

When converting leads, consider the following rules and guidelines:

Field Mappings

The system automatically maps standard lead fields to standard account, contact, and opportunity fields. For custom lead fields, your Salesforce administrator can specify how they map to custom account, contact, and opportunity fields.

Record Types

If the organization uses record types, the default record type of the new owner is assigned to records created during lead conversion. For more information about record types, see the Salesforce online help.

Picklist Values

The system assigns the default picklist values for the account, contact, and opportunity when mapping any standard lead picklist fields that are blank. If your organization uses record types, blank values are replaced with the default picklist values of the new record owner.

String Values

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Errors

If any of the leads fail to convert as part of a bulk operation, the lead conversion is retried for each lead individually.

Automatic Subscriptions for Chatter Feeds

When you convert a lead into a new account, contact, and opportunity, the lead owner is unsubscribed from the lead record's Chatter feed. The lead owner, the owner of the generated records, and users that were subscribed to the lead aren't automatically subscribed to the generated records, unless they have automatic subscriptions enabled in their Chatter feed settings. They must have automatic subscriptions enabled to see changes to the account, contact, and opportunity records in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Basic Steps for Converting Leads

Converting leads involves the following basic steps:

1. The client application determines the IDs of any lead(s) to be converted.
2. Optionally, the client application determines the IDs of any account(s) to merge the lead into. The client application can use SOSL or SOQL to search for accounts that match the lead name, as in the following example:

   ```
   select id, name from account where name='CompanyNameOfLeadBeingMerged'
   ```

3. Optionally, the client application determines the IDs of contact(s) to merge the lead into. The client application can use SOSL or SOQL to search for contacts that match the lead contact name, as in the following example:

```
select id, name from contact where firstName='FirstName' and lastName='LastName' and
accountId = '001...'
```

4. Optionally, the client application determines whether opportunities should be created from the lead, or the ID of an opportunity to merge the lead into. The client application can use SOSL or SOQL to search for contacts that match the lead contact name, as in the following example:

```
select id, name from opportunity where name='OpportunityNameOfOpportunityBeingMerged'
```

5. The client application queries the LeadStatus table to obtain all of the possible converted status options (

```
SELECT Id, MasterLabel FROM LeadStatus WHERE IsConverted=true
```

), and then selects a value for the Converted Status.

6. The client application calls `convertLead()`.
7. The client application iterates through the returned result(s) and examine each LeadConvertResult object to determine whether conversion succeeded for each lead.
8. As an optional best practice, the client application creates tasks in which the `WhoId` is the `ContactId` and, if an opportunity is created, the `WhatId` is the `OpportunityId`.
9. Optionally, when converting leads owned by a queue, the owner must be specified. This is because accounts and contacts cannot be owned by a queue. Even if you are specifying an existing account or contact, you must still specify an owner.

Sample Code—Java

This sample shows how to convert leads. It creates two leads and converts them. Next, it iterates through the lead conversion results and writes the IDs of the account, contact, and opportunity created for each lead.

```java
public String[] convertLeadRecords() {
   String[] result = new String[4];
   try {

      // Create two leads to convert
      Lead[] leads = new Lead[2];
      Lead lead = new Lead();
      lead.setLastName("Mallard");
      lead.setFirstName("Jay");
      lead.setCompany("Wingo Ducks");
      lead.setPhone("(707) 555-0328");
      leads[0] = lead;
      lead = new Lead();
      lead.setLastName("Platypus");
      lead.setFirstName("Ogden");
      lead.setCompany("Denio Water Co.");
      lead.setPhone("(775) 555-1245");
      leads[1] = lead;
      SaveResult[] saveResults = connection.create(leads);

      // Create a LeadConvert array to be used
      // in the convertLead() call
```

```
      LeadConvert[] leadsToConvert = new LeadConvert[saveResults.length];

      for (int i = 0; i < saveResults.length; ++i) {
         if (saveResults[i].isSuccess()) {
            System.out
                  .println("Created new Lead: " + saveResults[i].getId());
            leadsToConvert[i] = new LeadConvert();
            leadsToConvert[i].setConvertedStatus("Closed - Converted");
            leadsToConvert[i].setLeadId(saveResults[i].getId());
            result[0] = saveResults[i].getId();
         } else {
            System.out.println("\nError creating new Lead: "
                  + saveResults[i].getErrors()[0].getMessage());
         }
      }
      // Convert the leads and iterate through the results
      LeadConvertResult[] lcResults = connection.convertLead(leadsToConvert);
      for (int j = 0; j < lcResults.length; ++j) {
         if (lcResults[j].isSuccess()) {
            System.out.println("Lead converted successfully!");
            System.out.println("Account ID: " + lcResults[j].getAccountId());
            System.out.println("Contact ID: " + lcResults[j].getContactId());
            System.out.println("Opportunity ID: "
                  + lcResults[j].getOpportunityId());
         } else {
            System.out.println("\nError converting new Lead: "
                  + lcResults[j].getErrors()[0].getMessage());
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return result;
}
```

Sample Code—C#

This sample shows how to convert leads. It creates two leads and converts them. Next, it iterates through the lead conversion results and writes the IDs of the account, contact, and opportunity created for each lead.

```
public String[] convertLeadRecords()
{
   String[] result = new String[4];
   try
   {
      // Create two leads to convert
      Lead[] leads = new Lead[2];
      Lead lead = new Lead();
      lead.LastName = "Mallard";
      lead.FirstName = "Jay";
      lead.Company = "Wingo Ducks";
      lead.Phone = "(707) 555-0328";
      leads[0] = lead;
```

```
      lead = new Lead();
      lead.LastName = "Platypus";
      lead.FirstName = "Ogden";
      lead.Company = "Denio Water Co.";
      lead.Phone = "(775) 555-1245";
      leads[1] = lead;
      SaveResult[] saveResults = binding.create(leads);

      // Create a LeadConvert array to be used
      //   in the convertLead() call
      LeadConvert[] leadsToConvert =
            new LeadConvert[saveResults.Length]; ;
      for (int i = 0; i < saveResults.Length; ++i)
      {
         if (saveResults[i].success)
         {
            Console.WriteLine("Created new Lead: " +
                  saveResults[i].id);
            leadsToConvert[i] = new LeadConvert();
            leadsToConvert[i].convertedStatus = "Closed - Converted";
            leadsToConvert[i].leadId = saveResults[i].id;
            result[0] = saveResults[i].id;
         }
         else
         {
            Console.WriteLine("\nError creating new Lead: " +
                  saveResults[i].errors[0].message);
         }
      }
      // Convert the leads and iterate through the results
      LeadConvertResult[] lcResults =
            binding.convertLead(leadsToConvert);
      for (int j = 0; j < lcResults.Length; ++j)
      {
         if (lcResults[j].success)
         {
            Console.WriteLine("Lead converted successfully!");
            Console.WriteLine("Account ID: " +
                     lcResults[j].accountId);
            Console.WriteLine("Contact ID: " +
                     lcResults[j].contactId);
            Console.WriteLine("Opportunity ID: " +
                     lcResults[j].opportunityId);
         }
         else
         {
            Console.WriteLine("\nError converting new Lead: " +
                  lcResults[j].errors[0].message);
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
```

```
                              e.Message + "\n" + e.StackTrace);
    }
    return result;
}
```

LeadConvert Arguments

This call accepts an array of LeadConvert objects (100 maximum). A LeadConvert object contains the following properties.

Name	Type	Description
`accountId`	ID	ID of the Account into which the lead will be merged. Required only when updating an existing account, including person accounts. If no `accountID` is specified, then the API creates a new account. To create a new account, the client application must be logged in with sufficient access rights. To merge a lead into an existing account, the client application must be logged in with read/write access to the specified account. The account name and other existing data are not overwritten. For information on IDs, see ID Field Type.
`contactId`	ID	ID of the Contact into which the lead will be merged (this contact must be associated with the specified `accountId`, and an `accountId` must be specified). Required only when updating an existing contact. **Important:** If you are converting a lead into a person account, do not specify the `contactId` or an error will result. Specify only the `accountId` of the person account. If no `contactID` is specified, then the API creates a new contact that is implicitly associated with the Account. To create a new contact, the client application must be logged in with sufficient access rights. To merge a lead into an existing contact, the client application must be logged in with read/write access to the specified contact. The contact name and other existing data are not overwritten (unless `overwriteLeadSource` is set to `true`, in which case only the `LeadSource` field is overwritten).

`convertedStatus`	string	Valid LeadStatus value for a converted lead. Required. To obtain the list of possible values, the client application queries the LeadStatus object. For example:
		`SELECT Id, MasterLabel`
		`FROM LeadStatus WHERE IsConverted=true`

`doNotCreateOpportunity`	boolean	Specifies whether to create an Opportunity during lead conversion (`false`, the default) or not (`true`). Set this flag to `true` only if you do not want to create an opportunity from the lead. An opportunity is created by default.
`leadId`	ID	ID of the Lead to convert. Required. For information on IDs, see ID Field Type.
`opportunityId`	ID	The ID of an existing opportunity to relate to the lead. The `opportunityId` and `opportunityName` arguments are mutually exclusive. Specifying a value for both results in an error. If

Name	Type	Description
		doNotCreateOpportunity argument is true, then no Opportunity is created and this field must be left blank; otherwise, an error is returned.
opportunityName	string	Name of the opportunity to create. If no name is specified, then this value defaults to the company name of the lead. The maximum length of this field is 80 characters. The opportunityId and opportunityName arguments are mutually exclusive. Specifying a value for both results in an error. If doNotCreateOpportunity argument is true, then no Opportunity is created and this field must be left blank; otherwise, an error is returned.
overwriteLeadSource	boolean	Specifies whether to overwrite the LeadSource field on the target Contact object with the contents of the LeadSource field in the source Lead object (true), or not (false, the default). To set this field to true, the client application must specify a contactId for the target contact.
ownerId	ID	Specifies the ID of the person to own any newly created account, contact, and opportunity. If the client application does not specify this value, then the owner of the new object will be the owner of the lead. Not applicable when merging with existing objects—if an ownerId is specified, the API does not overwrite the ownerId field in an existing account or contact. For information on IDs, see ID Field Type.
sendNotificationEmail	boolean	Specifies whether to send a notification email to the owner specified in the ownerId (true) or not (false, the default).

Response

LeadConvertResult[]

Fault

UnexpectedErrorFault

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

LeadConvertResult

This call returns an array of LeadConvertResult objects. Each element in the LeadConvertResult array corresponds to the LeadConvert[] array passed as the leadConverts parameter in the convertLead() call. For example, the object returned in the first index in the LeadConvertResult array matches the object specified in the first index of the LeadConvert[] array. A LeadConvertResult object has the following properties:

Name	Type	Description
accountId	ID	ID of the new Account (if a new account was specified) or the ID of the account specified when `convertLead()` was invoked.
contactId	ID	ID of the new Contact (if a new contact was specified) or the ID of the contact specified when `convertLead()` was invoked. For information on IDs, see ID Field Type.
leadId	ID	ID of the converted Lead. For information on IDs, see ID Field Type.
opportunityId	ID	ID of the new or existing Opportunity, if one was created or related to the lead when `convertLead()` was invoked. For information on IDs, see ID Field Type.
success	boolean	Indicates whether the `convertLead()` call succeeded (`true`) or not (`false`) for this object.
errors	Error[]	If an error occurred during the `create()` call, an array of one or more Error objects providing the error code and description.

create()

Adds one or more new records to your organization's data.

Syntax

```
SaveResult[] = connection.create(sObject[] sObjects);
```

Usage

Use `create()` to add one or more records, such as an Account or Contact record, to your organization's information. The `create()` call is analogous to the INSERT statement in SQL.

When creating objects, consider the following rules and guidelines.

Permissions

Your client application must be logged in with sufficient access rights to create records within the specified object. For more information, see Factors that Affect Data Access.

Special Handling

Certain objects—and certain fields within those objects—require special handling or permissions. For example, you might also need permissions to access the object's parent object. Before you attempt to `create()` a record for a particular object, be sure to read its description in the Standard Objects.

Createable Fields

Only objects where `createable` is `true` can be created via the `create()` call. To determine whether a given object can be created, your client application can invoke the `describeSObjects()` call on the object and inspect its `createable` property.

Automatically Maintained Fields

The API generates unique values for ID fields automatically. For `create()`, you cannot explicitly specify an ID value in the sObject. The SaveResult[] object contains the ID of each record that was successfully created. For information on IDs, see ID Field Type.

The API populates certain fields automatically, such as `CreatedDate`, `CreatedById`, `LastModifiedDate`, `LastModifiedById`, and `SystemModstamp`. You cannot explicitly specify these values.

Required Fields

For required fields that do not have a preconfigured default value, you must supply a value. For more information, see Required Fields.

Default Values

For some objects, some fields have a default value, such as `OwnerID`. If you do not specify a value for such fields, the API populates the fields with the default value. For example, if you do not override `OwnerID`, then the API populates this field with the user ID associated with the user as whom your client application is logged in.

- For required fields that do not have a preconfigured default value, you must supply a value.
- For all other fields in the object, if you do not explicitly specify a value, then its value is `null (VT_EMPTY)`.

Referential Integrity

Your client application must conform to the rules of referential integrity. For example, if you are creating a record for an object that is the child of a parent object, you must supply the foreign key information that links the child to the parent. For example, when creating a CaseComment, you must supply the valid case ID for the parent Case, and that parent Case must exist in the database.

Valid Data Values

You must supply values that are valid for the field's data type, such as integers (not alphabetic characters) for integer fields. In your client application, follow the data formatting rules specified for your programming language and development tool (your development tool will handle the appropriate mapping of data types in SOAP messages).

String Values

When storing values in string fields, the API trims any leading and trailing whitespace. For example, if the value of a name field is entered as `" ABC Company "`, then the value is stored in the database as `"ABC Company"`.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Assignment Rules

When creating new Account (accounts fire Territory Management assignment rules), Case, or Lead records, your client application can set options in the AssignmentRuleHeader to have the case or lead automatically assigned to one or more users based on assignment rules configured in the Salesforce user interface.

Maximum Number of Records Created

Your client application can add up to 200 records in a single `create()` call. If a create request exceeds 200 objects, then the entire operation fails.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later. The EntitySubscription object represents a subscription of a user following a record or another user.

Disabling Feed Notifications

If you're processing a large number of records and don't want to track the changes in various feeds related to the records, use DisableFeedTrackingHeader. This is especially useful for bulk changes.

Creating Records for Different Object Types

You can create records for multiple object types, including custom objects, in one call with API version 20.0 and later. For example, you could create a contact and an account in one call. You can create records for up to 10 object types in one call.

Records are saved in the same order that they are entered in the `sObjects` input array. If you are entering new records that have a parent-child relationship, the parent record must precede the child record in the `sObjects` array. For example, if you are creating a contact that references an account that is also being created in the same call, the account must have a smaller index in the `sObjects` array than the contact does. The contact references the account by using an `External ID` field.

You can't add a record that references another record of the same object type in the same call. For example, the Contact object has a `Reports To` field that is a reference to another contact. You can't create two contacts in one call if one contact uses the `Reports To` field to reference a second contact in the `sObjects` array. You can create a contact that references another contact that has been previously created.

Records for different object types are broken into multiple chunks by Salesforce. A chunk is a subset of the `sObjects` input array and each chunk contains records of one object type. Data is committed on a chunk-by-chunk basis. Any Apex triggers related to the records in a chunk are invoked once per chunk. Consider an `sObjects` input array containing the following set of records:

```
account1, account2, contact1, contact2, contact3, case1, account3, account4, contact4
```

Salesforce splits the records into five chunks:

1. `account1, account2`
2. `contact1, contact2, contact3`

3. `case1`
4. `account3, account4`
5. `contact4`

Each call can process up to 10 chunks. If the `sObjects` array contains more than 10 chunks, you must process the records in more than one call.

Warning: You can't create records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:

- Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Data Sets" in the Salesforce online help.
- GroupMember
- Group
- User if the `UserRoleId` field is not being set.

`create()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to create a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key field to an instance of the parent sObject that only has the external ID field specified. This external ID should match the external ID value on the parent record.

The following Java and C# examples show you how to create an opportunity and relate it to an existing account using a custom external ID field named `MyExtId__c`. Each example creates an opportunity, sets the required fields, and then sets the opportunity external ID field to the account object that has only the external ID field specified. The code then creates the opportunity. Once the opportunity is created, the account will be its parent.

Java Example

```
public void createForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("OpportunityWithFK");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);

      Account parentAccountRef = new Account();
      parentAccountRef.setMyExtId__c("SAP1111111");
      newOpportunity.setAccount(parentAccountRef);

      SaveResult[] results = connection
            .create(new SObject[] { newOpportunity });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void createForeignKeySample()
{
```

```
    try
    {
       Opportunity newOpportunity = new Opportunity();
       newOpportunity.Name = "OpportunityWithFK";
       newOpportunity.StageName = "Prospecting";
       DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
       newOpportunity.CloseDate = dt.AddDays(7);
       newOpportunity.CloseDateSpecified = true;

       // Create the parent reference.
       // Used only for foreign key reference
       //  and doesn't contain any other fields
       Account accountReference = new Account();
       accountReference.MyExtId__c = "SAP1111111";
       newOpportunity.Account = accountReference;

       // Create the account and the opportunity
       SaveResult[] results = binding.create(new sObject[] {
                                newOpportunity });
    }
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                                e.Message + "\n" + e.StackTrace);
    }
}
```

Creating Parent and Child Records in a Single Call Using Foreign Keys

You can use external ID fields as foreign keys to create parent and child records of different sObject types in a single call instead of creating the parent record first, querying its ID, and then creating the child record. To do this:

- Create the child sObject and populate its required fields, and optionally other fields.
- Create the parent reference sObject used only for setting the parent foreign key reference on the child sObject. This sObject has only the external ID field defined and no other fields set.
- Set the foreign key field of the child sObject to the parent reference sObject you just created.
- Create another parent sObject to be passed to the `create()` call. This sObject must have the required fields (and optionally other fields) set in addition to the external ID field.
- Call `create()` by passing it an array of sObjects to create. The parent sObject must precede the child sObject in the array, that is, the array index of the parent must be lower than the child's index.

The parent and child records are records related through a predefined relationship, such as a master-detail or lookup relationship. You can create related records that are up to 10 levels deep. Also, the related records created in a single call must have different sObject types. For more information, see Creating Records for Different Object Types.

The following Java and C# examples show you how to create an opportunity with a parent account in the same `create()` call. Each example creates an Opportunity sObject and populates some of its fields, then creates two Account objects. The first account is only for the foreign key relationship, and the second is for the account creation and has the account fields set. Both accounts have the external ID field, `MyExtID__c`, set. Next, the sample calls `create()` by passing it an array of sObjects. The first element in the array is the parent sObject and the second is the opportunity sObject. The `create()` call creates the opportunity with its parent account in a single call. Finally, the sample checks the results of the call and writes the IDs of the created records to the console, or the first error if record creation fails.

Java Example

```
public void createForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("OpportunityWithAccountInsert");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);

      // Create the parent reference.
      // Used only for foreign key reference
      // and doesn't contain any other fields.
      Account accountReference = new Account();
      accountReference.setMyExtID__c("SAP111111");
      newOpportunity.setAccount(accountReference);

      // Create the Account object to insert.
      // Same as above but has Name field.
      // Used for the create call.
      Account parentAccount = new Account();
      parentAccount.setName("Hallie");
      parentAccount.setMyExtID__c("SAP111111");

      // Create the account and the opportunity.
      SaveResult[] results = connection.create(new SObject[] {
            parentAccount, newOpportunity });

      // Check results.
      for (int i = 0; i < results.length; i++) {
         if (results[i].isSuccess()) {
            System.out.println("Successfully created ID: "
                  + results[i].getId());
         } else {
            System.out.println("Error: could not create sobject "
                  + "for array element " + i + ".");
            System.out.println("   The error reported was: "
                  + results[i].getErrors()[0].getMessage() + "\n");
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void createForeignKeySample()
{
   try
   {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.Name = "OpportunityWithAccountInsert";
      newOpportunity.StageName = "Prospecting";
```

```
      DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
      newOpportunity.CloseDate = dt.AddDays(7);
      newOpportunity.CloseDateSpecified = true;

      // Create the parent reference.
      // Used only for foreign key reference
      //  and doesn't contain any other fields.
      Account accountReference = new Account();
      accountReference.MyExtID__c = "SAP111111";
      newOpportunity.Account = accountReference;

      // Create the Account object to insert.
      // Same as above but has Name field.
      // Used for the create call.
      Account parentAccount = new Account();
      parentAccount.Name = "Hallie";
      parentAccount.MyExtID__c = "SAP111111";

      // Create the account and the opportunity.
      SaveResult[] results = binding.create(new sObject[] {
      parentAccount, newOpportunity });

      // Check results.
      for (int i = 0; i < results.Length; i++)
      {
         if (results[i].success)
         {
            Console.WriteLine("Successfully created ID: "
                  + results[i].id);
         }
         else
         {
            Console.WriteLine("Error: could not create sobject "
                  + "for array element " + i + ".");
            Console.WriteLine("   The error reported was: "
                  + results[i].errors[0].message + "\n");
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                              e.Message + "\n" + e.StackTrace);
   }
}
```

Basic Steps for Creating Records

Creating records involves the following basic steps:

1. Create an sObject for one or more objects. For each record, populate its fields with the data that you want to add.
2. Construct an sObject[] array and populate that array with the objects that you want to create.
3. Call `create()`, passing in the sObject[] array.

4. Process the results in the `SaveResult`[] object to verify whether the records have been successfully created.

Sample Code—Java

This sample shows how to create records. It creates two Account objects and sets their fields. The Name of the second account isn't set so that an error occurs on creation, since Name is a required field. After making the `create()` call by passing the array containing the two accounts, the sample iterates over the results and writes the ID of the new account or an error message if the account creation fails. Finally, the sample returns an array of the new account IDs, which in this case contains only one ID.

```
public String[] createRecords() {
   // Create two accounts
   String[] result = new String[2];
   Account account1 = new Account();
   Account account2 = new Account();

   // Set some fields on the account object
   account1.setName("The Brick Hut");
   account1.setBillingStreet("403 McAdoo St");
   account1.setBillingCity("Truth or Consequences");
   account1.setBillingState("NM");
   account1.setBillingPostalCode("87901");
   account1.setBillingCountry("US");
   // Required Name field is not being set on account2,
   // so this record should fail during create.
   // account2.setName("Camp One Creations");
   account2.setBillingStreet("25800 Arnold Dr");
   account2.setBillingCity("Sonoma");
   account2.setBillingState("CA");
   account2.setBillingPostalCode("95476");
   account2.setBillingCountry("US");
   Account[] accounts = { account1, account2 };

   try {
      // Call create() to add the accounts
      SaveResult[] saveResults = connection.create(accounts);
      // Iterate through the results.
      // There should be one successful creation
      // and one failed creation.
      for (int i = 0; i < saveResults.length; i++) {
         if (saveResults[i].isSuccess()) {
            System.out.println("Successfully created Account ID: "
                  + saveResults[i].getId());
            result[i] = saveResults[i].getId();
         } else {
            System.out.println("Error: could not create Account "
                  + "for array element " + i + ".");
            System.out.println("   The error reported was: "
                  + saveResults[i].getErrors()[0].getMessage() + "\n");
            result[i] = saveResults[i].getId();
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
```

```
    return result;
}
```

Sample Code—C#

This sample shows how to create records. It creates two Account objects and sets their fields. The Name of the second account isn't set so that an error occurs on creation, since Name is a required field. After making the `create()` call by passing the array containing the two accounts, the sample iterates over the results and writes the ID of the new account or an error message if the account creation fails. Finally, the sample returns an array of the new account IDs, which in this case contains only one ID.

```
public String[] createRecords()
{
   // Create two accounts
   String[] result = new String[2];
   Account account1 = new Account();
   Account account2 = new Account();

   // Set some fields on the account object
   account1.Name = "The Brick Hut";
   account1.BillingStreet = "403 McAdoo St";
   account1.BillingCity = "Truth or Consequences";
   account1.BillingState = "NM";
   account1.BillingPostalCode = "87901";
   account1.BillingCountry = "US";
   // Required Name field is not being set on account2,
   // so this record should fail during create.
   // account2.Name = "Camp One Creations";
   account2.BillingStreet = "25800 Arnold Dr";
   account2.BillingCity = "Sonoma";
   account2.BillingState = "CA";
   account2.BillingPostalCode = "95476";
   account2.BillingCountry = "US";
   Account[] accounts = { account1, account2 };

   try
   {
      // Call create() to add the accounts
      SaveResult[] saveResults = binding.create(accounts);
      // Iterate through the results.
      // There should be one successful creation
      //   and one failed creation.
      for (int i = 0; i < saveResults.Length; i++)
      {
         if (saveResults[i].success)
         {
            Console.WriteLine("Successfully created Account ID: " +
                  saveResults[i].id);
            result[i] = saveResults[i].id;
         }
         else
         {
            Console.WriteLine("Error: could not create Account " +
                  "for array element " + i + "."
```

```
            );
            Console.WriteLine("   The error reported was: " +
            saveResults[i].errors[0].message + "\n");
            result[i] = saveResults[i].id;
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                e.Message + "\n" + e.StackTrace);
   }

   return result;
}
```

Arguments

Name	Type	Description
sObjects	sObject[]	Array of one or more sObject objects to create(). Limit: 200 sObject values.

Response

SaveResult[]

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

upsert()

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

SaveResult

The `create()` call returns an array of `SaveResult` objects. Each element in the `SaveResult` array corresponds to the sObject[] array passed as the `sObjects` parameter in the `create()` call. For example, the object returned in the first index in the `SaveResult` array matches the object specified in the first index of the sObject[] array. A `SaveResult` object has the following properties:

Name	Type	Description
id	ID	ID of the sObject that you attempted to `create()`. If this field contains a value, then the object was created successfully. If this field is empty, then the object was not created and the API returned error information instead.
success	boolean	Indicates whether the `create()` call succeeded (`true`) or not (`false`) for this object.
errors	Error[]	If an error occurred during the `create()` call, an array of one or more Error objects providing the error code and description. If your organization has active duplicate rules and a duplicate is detected, the SaveResult includes an Error with a data type of DuplicateError.

delete()

Deletes one or more records from your organization's data.

Syntax

```
DeleteResult[] = connection.delete(ID[] ids);
```

Usage

Use `delete()` to delete one or more existing records, such as individual accounts or contacts, in your organization's data. The `delete()` call is analogous to the `DELETE` statement in SQL.

Rules and Guidelines

When deleting objects, consider the following rules and guidelines:

- Your client application must be logged in with sufficient access rights to delete individual objects within the specified object. For more information, see Factors that Affect Data Access.
- In addition, you might also need permission to access this object's parent object. For special access requirements, see the object's description in Standard Objects.
- To ensure referential integrity, the `delete()` call supports cascading deletions. If you delete a parent object, you delete its children automatically, as long as each child object can be deleted. For example, if you delete a Case, the API automatically deletes any CaseComment, CaseHistory, and CaseSolution objects associated with that case. However, if a CaseComment is not deletable or is currently being used, then the `delete()` call on the parent Case will fail.
- Certain objects cannot be deleted via the API. To delete an object via the `delete()` call, its object must be configured as deletable (`deletable` is `true`). To determine whether a given object can be deleted, your client application can invoke the `describeSObjects()` call on the object and inspect its `deletable` property.
- You can't delete records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:
  - Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Data Sets" in the Salesforce online help.

- GroupMember
- Group
- User

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Basic Steps for Deleting Records

Deleting records involves the following basic steps:

1. Determine the ID of each record that you want to delete. For example, you might call `query()` to retrieve a set of records that you want to delete based on specific criteria.
2. Construct an ID[] array and populate it with the IDs of each record that you want to delete. You can specify the IDs of different types of objects in the same call. For example, you could specify the ID for an individual Account and an individual Contact in the same array. For information on IDs, see ID Field Type.
3. Call `delete()`, passing in the ID[] array.
4. Process the results in the `DeleteResult`[] to verify whether the records have been successfully deleted.

Sample Code—Java

This sample shows how to delete records based on record IDs. The method in this sample accepts an array of IDs, which it passes to the `delete()` call and makes the call. It then parses the results and writes the IDs of the deleted records to the console or the first returned error if the deletion failed.

```
public void deleteRecords(String[] ids) {
   try {
      DeleteResult[] deleteResults = connection.delete(ids);
      for (int i = 0; i < deleteResults.length; i++) {
         DeleteResult deleteResult = deleteResults[i];
         if (deleteResult.isSuccess()) {
            System.out
                  .println("Deleted Record ID: " + deleteResult.getId());
         } else {
            // Handle the errors.
            // We just print the first error out for sample purposes.
            Error[] errors = deleteResult.getErrors();
            if (errors.length > 0) {
               System.out.println("Error: could not delete " + "Record ID "
                     + deleteResult.getId() + ".");
               System.out.println("   The error reported was: ("
                     + errors[0].getStatusCode() + ") "
                     + errors[0].getMessage() + "\n");
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
```

```
    }
}
```

Sample Code—C#

This sample shows how to delete records based on record IDs. The method in this sample accepts an array of IDs, which it passes to the `delete()` call and makes the call. It then parses the results and writes the IDs of the deleted records to the console or the first returned error if the deletion failed.

```
public void deleteRecords(String[] ids)
{
   try
   {
      DeleteResult[] deleteResults = binding.delete(ids);
      for (int i = 0; i < deleteResults.Length; i++)
      {
         DeleteResult deleteResult = deleteResults[i];
         if (deleteResult.success)
         {
            Console.WriteLine("Deleted Record ID: " + deleteResult.id);
         }
         else
         {
            // Handle the errors.
            // We just print the first error out for sample purposes.
            Error[] errors = deleteResult.errors;
            if (errors.Length > 0)
            {
               Console.WriteLine("Error: could not delete " + "Record ID "
                     + deleteResult.id + ".");
               Console.WriteLine("   The error reported was: ("
                     + errors[0].statusCode + ") "
                     + errors[0].message + "\n");
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
ids	ID[]	Array of one or more IDs associated with the objects to delete. In version 7.0 and later, you can pass a maximum of 200 object IDs to the `delete()` call. In version 6.0 and earlier, the limit is 2,000.

Response

DeleteResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

DeleteResult

The `delete()` call returns an array of `DeleteResult` objects. Each element in the `DeleteResult` array corresponds to the ID[] array passed as the `ids` parameter in the `delete()` call. For example, the object returned in the first index in the `DeleteResult` array matches the object specified in the first index of the ID[] array.

A `DeleteResult` object has the following properties:

Name	Type	Description
`id`	ID	ID of an sObject that you attempted to delete. For information on IDs, see ID Field Type.
`success`	boolean	Indicates whether the `delete()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `delete()` call, an array of one or more Error objects providing the error information.

deleteByExample()

Use `deleteByExample()` to delete big object data from your org using an sObject as a template for what to delete. All data in a big object matching the values in the sObject templates are deleted.

Syntax

```
DeleteByExampleResult[] = connection.deleteByExample(sObject[] sObjects);
```

Rules and Guidelines

When deleting data, consider the following rules and guidelines:

- Your client application must be logged in with sufficient access rights to delete individual objects within the specified object. For more information, see Factors that Affect Data Access.
- You can't delete records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:

- Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Data Sets" in the Salesforce Help.
- GroupMember
- Group
- User

Basic Steps for Deleting Data

Deleting data involves the following basic steps:

1. Define an sObject using all the fields that make up the index of the big object.
2. Specify the values for each field.
3. Call `deleteByExample()`, passing in the sObject you created.
4. Process the results in the `DeleteByExampleResult[]` to verify whether the records have been successfully deleted.

Note: Repeating a successful `deleteByExample()` operation results in success, even if the data has already been deleted.

Sample Code—Custom Big Objects

This sample shows how to delete records in a custom big object. In this example, `Account__c`, `Game_Platform__c`, and `Play_Date__c` are part of the custom big object's index. All rows where `Account__c` is "001d000000Ky3xIAB", `Game_Platform__c` is "iOS", and `Play_Date__c` is "2017-11-28T19:13:36.000z" are deleted.

```
public static void main(String[] args) {
    try{
        //Declare an sObject that has the values to delete
        sObject[] sObjectsToDelete = new sObject[1];
        sObject[] customerBO = new sObject();
        customerBO.setType("Customer_Interaction__b");
        customerBO.setField("Account__c","001d000000Ky3xIAB");
        customerBO.setField("Game_Platform__c","iOS");
        customerBO.setField("Play_Date__c","2017-11-28T19:13:36.000z");
        sObjectsToDelete[0] = customerBO;

        DeleteByExampleResult[] result = connection.deleteByExample(sObjectsToDelete);
    }
}
```

Sample Code—Field Audit Trail

This sample shows how to delete records in `FieldHistoryArchive`. All rows with the specified criteria are deleted.

```
public static void main(String[] args) {
    try{
        //Declare an sObject that has the values to delete
        sObject[] sObjectsToDelete = new sObject[2];
        sObject[] fieldHistoryArchive_1 = new sObject();
        fieldHistoryArchive_1.setType("FieldHistoryArchive");
        fieldHistoryArchive_1.setField("FieldHistoryType","Account");
```

```
        fieldHistoryArchive_1.setField("ParentId","001d000000Ky3xIAB");
        fieldHistoryArchive_1.setField("CreatedDate","2017-11-28T19:13:36.000z");
        fieldHistoryArchive_1.setField("HistoryId","017D000000ESURXIA5");
        sObjectsToDelete[0] = fieldHistoryArchive_1;

        sObject[] fieldHistoryArchive_2 = new sObject();
        fieldHistoryArchive_2.setType("FieldHistoryArchive");
        fieldHistoryArchive_2.setField("FieldHistoryType","Account");
        fieldHistoryArchive_2.setField("ParentId","001d000000Ky3xIAB");
        fieldHistoryArchive_2.setField("CreatedDate","2017-11-29T19:13:36.000z");
        fieldHistoryArchive_2.setField("HistoryId","017D000000ESURMIA5");
        sObjectsToDelete[1] = fieldHistoryArchive_2;

        DeleteByExampleResult[] result = connection.deleteByExample(sObjectsToDelete);
    }
}
```

Arguments

Name	Type	Description
`sObject`	sObject[]	Array of one or more sObjects to use as templates for deletion.

Response

DeleteByExampleResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DeleteByExampleResult

The `deleteByExample()` call returns an array of `DeleteByExampleResult` objects. Each element in the `DeleteByExampleResult` array corresponds to the sObject[] array passed in the `deleteByExample()` call. For example, the object returned in the first index in the `DeleteByExampleResult` array matches the sObject specified in the first index of the sObject[] array.

A `DeleteByExampleResult` object has the following properties:

Name	Type	Description
`entity`	sObject	Details for the sObject that you attempted to delete.
`rowCount`	long	Indicates the number of rows that were deleted.
`success`	boolean	Indicates whether the `deleteByExample()` call succeeded (`true`) or not (`false`) for this object.

Name	Type	Description
`errors`	Error[]	If an error occurred during the `deleteByExample()` call, an array of one or more Error objects providing the error information.

`emptyRecycleBin()`

Delete records from the recycle bin immediately.

Syntax

```
EmptyRecycleBinResult[] = connection.emptyRecycleBin(ID[] ids);
```

Usage

The Recycle Bin lets you view and restore recently deleted records for 15 days before they are permanently deleted. Your org can have up to 5,000 records per license in the Recycle Bin at any one time. For example, if your org has five user licenses, 25,000 records can be stored in the Recycle Bin. If your org reaches its Recycle Bin limit, Salesforce automatically removes the oldest records, as long as they have been in the recycle bin for at least two hours.

If you know you will be adding a great number of records to the Recycle Bin and you know you won't need to `undelete()` them, you may wish to remove them before the Salesforce process deletes records. For example, you can use this call if you are loading a large number of records for testing, or if you are doing a large number of `create()` calls followed by `delete()` calls.

Rules and Guidelines

When emptying recycle bins, consider the following rules and guidelines:

- The logged in user can delete any record that he or she can query in their Recycle Bin, or the recycle bins of any subordinates. If the logged in user has Modify All Data permission, he or she can query and delete records from any Recycle Bin in the organization.
- Available in version 10.0 and later.
- Maximum number of records is 200.
- Do not include the IDs of any records that will be cascade deleted, or an error will occur.
- Once records are deleted using this call, they cannot be `undelete()`d.
- After records are deleted from the Recycle Bin using this call, they can be queried using `queryAll()` for some time. Typically this time is 24 hours, but may be shorter or longer.

Sample Code—Java

This sample shows how to empty the Recycle Bin. It accepts an array containing the IDs of the records to remove from the Recycle Bin. It calls `emptyRecycleBin()` and passes it the array of IDs. Next, it iterates over the results and writes the IDs of the removed records or the first error of the failed records to the console.

```
public void emptyRecycleBin(String[] ids) {
   try {
      EmptyRecycleBinResult[] emptyRecycleBinResults = connection
            .emptyRecycleBin(ids);
```

```
            for (int i = 0; i < emptyRecycleBinResults.length; i++) {
               EmptyRecycleBinResult emptyRecycleBinResult = emptyRecycleBinResults[i];
               if (emptyRecycleBinResult.isSuccess()) {
                  System.out.println("Recycled ID: "
                        + emptyRecycleBinResult.getId());
               } else {
                  Error[] errors = emptyRecycleBinResult.getErrors();
                  if (errors.length > 0) {
                     System.out
                           .println("Error code: " + errors[0].getStatusCode());
                     System.out
                           .println("Error message: " + errors[0].getMessage());
                  }
               }
            }
      } catch (ConnectionException ce) {
         ce.printStackTrace();
      }
}
```

Sample Code—C#

This sample shows how to empty the Recycle Bin. It accepts an array containing the IDs of the records to remove from the Recycle Bin. It calls `emptyRecycleBin()` and passes it the array of IDs. Next, it iterates over the results and writes the IDs of the removed records or the first error of the failed records to the console.

```
public void emptyRecycleBin(String[] ids)
{
   try
   {
      EmptyRecycleBinResult[] emptyRecycleBinResults =
         binding.emptyRecycleBin(ids);
      for (int i = 0; i < emptyRecycleBinResults.Length; i++)
      {
         EmptyRecycleBinResult emptyRecycleBinResult = emptyRecycleBinResults[i];
         if (emptyRecycleBinResult.success)
         {
            Console.WriteLine("Recycled ID: "
                  + emptyRecycleBinResult.id);
         }
         else
         {
            Error[] errors = emptyRecycleBinResult.errors;
            if (errors.Length > 0)
            {
               Console.WriteLine("Error code: " + errors[0].statusCode);
               Console.WriteLine("Error message: " + errors[0].message);
            }
         }
      }
   }
   catch (SoapException e)
   {
```

```
        Console.WriteLine("An unexpected error has occurred: " +
                                        e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
ids	ID[]	Array of one or more IDs associated with the records to delete from the Recycle Bin. Maximum number of records is 200.

Response

EmptyRecycleBinResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

delete()

undelete()

EmptyRecycleBinResult

The `emptyRecycleBin()` call returns an array of `EmptyRecycleBinResult` objects. Each element in the array corresponds to an element in the ID[] array passed as the parameter in the `emptyRecycleBin()` call. For example, the object returned in the first index in the `EmptyRecycleBinResult` array matches the object specified in the first index of the ID[] array.

A `EmptyRecycleBinResult` object has the following properties:

Name	Type	Description
id	ID	ID of an sObject that you attempted to delete from the Recycle Bin. For information about IDs, see ID Field Type.
isSuccess	boolean	Indicates whether the call succeeded (`true`) or not (`false`) for this record.
errors	Error[]	If an error occurred during the call, an array of one or more Error objects providing the error information.

executeListView()

Executes a list view's SOQL query to retrieve data, labels, and actions from a list view.

Syntax

```
ExecuteListViewResult result = connection.executeListView(ExecuteListViewResult request);
```

Usage

The `executeListView()` call takes an `ExecuteListViewRequest` object, executes the SOQL query for the list view, and returns the resulting data and presentation information in an `ExecuteListViewResult` object. This call is available in API version 32.0 and later.

Sample Code—Java

```
private void example(ApiProtocol protocol, AppVersion version) throws Exception {

        // Get the list results via the list view API
        EnterpriseConnection connection =
makeClient(getUserUtil().getUserWithModifyAllData(), AppVersion.VERSION_190,
                getName());
        ExecuteListViewRequest request = new ExecuteListViewRequest();
        request.setSobjectType("Account");
        request.setDeveloperNameOrId(listViews[0].getId());
        request.setLimit(50000);

        com.sforce.soap.enterprise.ExecuteListViewResult result =
connection.executeListView(request);
    }
```

Arguments

Name	Type	Description
`request`	ExecuteListViewRequest	An object that specifies the list view and the limit, offset, and ordering of the results.

Response

An `ExecuteListViewResult` object.

ExecuteListViewRequest

Use the `ExecuteListViewRequest` object with `executeListView()` to retrieve data, labels, and actions from a list view.

The `ExecuteListViewRequest` object has the following properties:

Name	Type	Description
`developerNameOrId`	string	The list view's ID or fully qualified developer name.
`limit`	int	The maximum number of records to return. Default: 25

Name	Type	Description
`offset`	int	The number of records to skip. Default: 0
`orderBy`	ListViewOrderBy[]	The order in which to return the records.
`sobjectType`	string	The API name of the sObject for the list view.

ExecuteListViewResult

Contains list view data that you retrieve programmatically.

To retrieve an `executeListViewResult` object, use the `executeListView()` call. The `executeListViewResult` object has the following properties:

Name	Type	Description
`columns`	ListViewColumn[]	An array of the columns in the list view.
`developerName`	string	The list view's fully qualified developer name.
`done`	boolean	If `true`, indicates that all records have been returned.
`id`	ID	The list view's ID.
`label`	string	The display label of the list view.
`records`	ListViewRecord[]	An array of records that match the list view query.
`size`	int	The number of records that are returned by the list view query.

ListViewColumn

Contains metadata about a single list view column.

The `ListViewColumn` object is returned by the `describeSoqlListViews()` and `executeListView()` calls. It has the following properties:

Name	Type	Description
`ascendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "A-Z" for a text field, or "Low to High" for a numeric field. Set to null if the column isn't sortable.
`descendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "Z-A" for a text field, or "High to Low" for a numeric field. Set to null if the column is not sortable.
`fieldNameOrPath`	string	The field name or SOQL field path for the column.
`hidden`	boolean	If true, specifies that the column is not displayed, and is present only to support the display of other columns or other client-side logic.
`label`	string	The localized display label for the column.

Name	Type	Description
selectListItem	string	The SOQL SELECT item for the column. The item might differ from the field name or path, due to display formatting (for example, toLabel for picklists).
sortDirection	orderByDirection	An enumerated value, one of the following if the column is sortable: • ascending • descending Set to null if the column is not sortable.
sortIndex	int	The zero-based index that indicates the column's position within a multilevel sort, or null if the records are not sorted by the column.
sortable	boolean	Whether the column is sortable, in which case it might be referenced in the ExecuteListView orderBy parameter.
type	FieldType	The column data type.

ListViewRecord

Represents a single row in a list view.

The `ListViewRecord` object is a member of the `ExecuteListViewResult` object and has the following properties:

Name	Type	Description
columns	ListViewRecordColumn[]	The columns and their values for the record. The record data columns are returned in the same order as metadata and describe columns. For any data column that's obtained by using `ExecuteListViewResult.getRecords()[0].getColumns[index]`, the corresponding describe column can be obtained with `ExecuteListViewResult.getColumns[index]`.

ListViewRecordColumn

Represents a single cell in a row from a list view.

The `ListViewRecordColumn` object is one cell (column) of a row (`ListViewRecord`) and has the following properties:

Name	Type	Description
fieldNameOrPath	string	The field name or SOQL field path for the column.
value	string	The contents of the record for a certain column, localized if appropriate, or null if there's no value.

findDuplicates()

Performs rule-based searches for duplicate records. The input is an array of sObject, each of which specifies the values to search for and the type of object that supplies the duplicate rules. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicates()` applies the rules to the values to do the search. The output identifies the detected duplicates for each sObject.

Syntax

```
FindDuplicatesResult[] duplicateResults =
    connection.findDuplicates(SObject[] inputSObjectArray);
```

Usage

Use `findDuplicates()` to apply duplicate rules associated with an object to values specified by each sObject. Each sObject also has a type that corresponds to an object.

`findDuplicates()` uses the duplicate rules for the object that has the same type as the sObject. For example, if the sObject type is Account, `findDuplicates()` uses the duplicate rules associated with the Account object.

Note:

- All the sObject elements in the input array must have the same type, and that type must correspond to an object type that supports duplicate rules.
- The input array is limited to 50 elements. If you exceed this limit, the SOAP call returns an API Fault Element containing the following fields:
  - ExceptionCode: `LIMIT_EXCEEDED`
  - exceptionMessage: `Configuration error: The number of records to check is greater than the permitted batch size.`

For each input `sObject`, `findDuplicates()` adds a FindDuplicatesResult object to the output array.

Matching is controlled by the values specified in the sObject. The values can include a record ID, a field map, or both. The specified values determine the behavior of `findDuplicates()`:

Record ID only

`findDuplicates()` searches the object defined by the duplicate rule for an existing record that has the same ID. Then it loads the values from that record, and searches for duplicates based on those values.

Field Map only

`findDuplicates()` loads the values from the map and searches for duplicates based on those values.

Record ID and Field Map

`findDuplicates()` searches the object defined by the duplicate rule for an existing record that has the same ID. It loads any values from that record that aren't specified in the map, and then loads values from the map. Based on the resulting union of values, `findDuplicates()` searches for duplicates.

The output of `findDuplicates()` is an array of FindDuplicatesResult objects with the same number of elements as the input array, and in the same order. The output objects encapsulate record IDs for duplicate records, if any. Optionally, the output objects also contain values from the duplicate records.

Each FindDuplicatesResult element contains a DuplicateResult object. If `findDuplicates()` doesn't find any duplicates for an sObject, the `duplicateRule` field in DuplicateResult contains the name of the duplicate rule that `findDuplicates()` applied, but the `matchResults` array is empty.

If the `includeRecordDetails` flag in DuplicateRuleHeader is set to `false`, `findDuplicates()` only returns the record IDs of the matching records. Otherwise, `findDuplicates()` returns all the fields specified in the primary CompactLayout associated with the target object.

Basic Steps for Using

1. Create one or more sObject objects with a type that corresponds to the object that has the duplicate rules you want to use.
2. In each sObject, specify record IDs or field maps (or both) to compare to records in the object.
3. Set DuplicateRuleHeader to control the output you want.

Sample

The following Java sample demonstrates how to search for duplicates of a Lead, using the standard Leads duplicate rule.

```
package wsc;

import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class Main {

  private static final String USERNAME = "YOUR-USERNAME";
  private static final String PASSWORD = "YOUR-PASSWORD&SECURITY-TOKEN";
  private static PartnerConnection connection = null;

  public static void main(String[] args) throws ConnectionException {

    // Create the configuration for the partner connection
    ConnectorConfig config = new ConnectorConfig();
    config.setUsername(USERNAME);
    config.setPassword(PASSWORD);

    // Initialize the connection
    connection = new PartnerConnection(config);

    SObject[] inputSObjectArray = new SObject[1];
    // Instantiate an empty Java SObject
    SObject searchCriteria = new SObject();
    // Set its type to Lead. This tells findDuplicates() to use the duplicate rules
    // for Lead
    searchCriteria.setType("Lead");
    /*
     * Set the necessary fields for matching, based on the standard matching rules for
Lead (Search
     * help.salesforce.com for "Standard Contact and Lead Matching Rule" to see the rules).
```

```
     */
    searchCriteria.setField("FirstName", "Marc");
    searchCriteria.setField("LastName", "Benioff");
    searchCriteria.setField("Company", "Salesforce.com Inc");
    searchCriteria.setField("Title", "CEO");
    searchCriteria.setField("Email", "ceo@salesforce.com");
    // Add the sObject to the input array
    inputSObjectArray[0] = searchCriteria;
    /*
     * By default, findDuplicates() returns only record IDs. To return additional values,
 set the second parameter
     * to true.
     */
    connection.setDuplicateRuleHeader(
        /*
         * @param allowSave - Not Applicable for this API call
         */
        false,
        /* @param includeRecordDetails */
        false,
        /*
         * @param runAsCurrentUser - Not Applicable for this API call
         */
        false);

    // Invoke findDuplicates() to find duplicates based on the information in the
    // SObject array
    FindDuplicatesResult[] callResults = connection.findDuplicates(inputSObjectArray);

    // Iterate through the results
    // For each SObject in the input array, get the duplicate results
    for (FindDuplicatesResult findDupeResult : callResults) {
      // If errors were found for this SObject, print them out
      if (!findDupeResult.isSuccess()) {
        for (Error findDupError : findDupeResult.getErrors()) {
          System.out.println("FindDuplicatesRule errors detected: " +
findDupError.getMessage());
        }
      } else {
        /*
         * Get the DuplicateResult object array for the result. Each element in the array
 represents the result
         * of testing one duplicate rule for the SObject. Process each DuplicateResult.
         */
        for (DuplicateResult dupeResult : findDupeResult.getDuplicateResults()) {
          System.out.println("Duplicate rule: " + dupeResult.getDuplicateRule());
          // Print out the name of the object associated with the duplicate
          // rule
          System.out.println("Source of this duplicate rule is: " +
dupeResult.getDuplicateRuleEntityType());
          for (MatchResult matchResult : dupeResult.getMatchResults()) {
            if (!matchResult.isSuccess()) {
              for (Error e : matchResult.getErrors()) {
```

```
                System.out.println("Errors detected: " + e.getMessage());
              }
            } else {
              System.out.println("Matching rule is: " + matchResult.getRule());
              System.out.println("Object type for this matching rule is: " +
matchResult.getEntityType());
              for (MatchRecord matchRecord : matchResult.getMatchRecords()) {
                System.out.println("Duplicate record ID: " +
matchRecord.getRecord().getId());
              }
            }
          }
        }
      }
    }
  }
}
```

Arguments

Name	Type	Description
`sObjects`	Array of sObject	Required. A list of sObject objects that contain values you want to search for.

Response

An array of `FindDuplicatesResult` objects.

FindDuplicatesResult

Represents the result of a duplicate search for a single sObject in the input array. Because the object associated with the sObject can have more than one duplicate rule, `FindDuplicatesResult` contains an array of DuplicateResult objects.

Fields

Field Name	Field Type	Description
`duplicateResults`	Array of `DuplicateResult` objects	The result of each duplicate rule applied by `findDuplicates()` to a single sObject.
`errors`	Array of Error objects	Contains an array of errors encountered by `findDuplicates()`.
`success`	boolean	This field is set to `true` if the `findDuplicates()` doesn't encounter any errors.

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidFieldFault`

findDuplicatesByIds()

Performs rule-based searches for duplicate records. The input is an array of IDs, each of which specifies the records for which to search for duplicates. The output identifies the detected duplicates for each object that supplies the duplicate rules. `findDuplicatesByIds()` applies the rules to the record IDs to do the search. The output identifies the detected duplicates for each ID.

Syntax

```
FindDuplicatesResult[] duplicateResults =
    connection.findDuplicatesByIds(Id[] inputIdArray);
```

Usage

Use `findDuplicatesByIds()` to apply duplicate rules associated with an object to records represented by the record IDs.

`findDuplicatesByIds()` uses the duplicate rules for the object that has the same type as the input record IDs. For example, if the record ID represents an Account, `findDuplicatesByIds()` uses the duplicate rules associated with the Account object.

Note:

- All record IDs in the input array must have the same object type, and that type must correspond to an object type that supports duplicate rules.
- The input array is limited to 50 elements. If you exceed this limit, the SOAP call returns an API Fault Element containing the following fields:
  - ExceptionCode: `LIMIT_EXCEEDED`
  - exceptionMessage: `Configuration error: The number of records to check is greater than the permitted batch size.`

For each input ID, `findDuplicatesByIds()` adds an object to the output array.

Matching is controlled by the values specified by the input record ID. The values can include a record ID only.

`findDuplicatesByIds()` searches the object defined by the duplicate rule for an existing record that has the same ID. Then it loads the values from that record, and searches for duplicates based on those values.

The output of `findDuplicatesByIds()` is an array of objects with the same number of elements as the input array, and in the same order. The output objects encapsulate record IDs for duplicate records. Optionally, the output objects also contain values from the duplicate records.

Each element contains a DuplicateResult object. If `findDuplicatesByIds()` doesn't find any duplicates for an sObject, the `duplicateRule` field in DuplicateResult contains the name of the duplicate rule that `findDuplicatesByIds()` applied, but the `matchResults` array is empty.

If the `includeRecordDetails` flag in DuplicateRuleHeader is set to `false`, `findDuplicatesByIds()` returns only the record IDs of the matching records. Otherwise, `findDuplicatesByIds()` returns all the fields specified in the primary CompactLayout associated with the target object.

Basic Steps for Using

1. Create one or more ID objects that correspond to the object that has the duplicate rules you want to use.
2. Specify record IDs to compare to records in the object.
3. Set DuplicateRuleHeader to control the output you want.

Sample

The following Java sample demonstrates how to search for duplicates of a Lead, using the standard Leads duplicate rule.

```
package wsc;

import com.sforce.soap.partner.*;
import com.sforce.soap.partner.Error;
import com.sforce.soap.partner.sobject.SObject;
import com.sforce.ws.ConnectionException;
import com.sforce.ws.ConnectorConfig;

public class Main {

  private static final String USERNAME = "YOUR-USERNAME";
  private static final String PASSWORD = "YOUR-PASSWORD&SECURITY-TOKEN";
  private static PartnerConnection connection = null;

  public static void main(String[] args) throws ConnectionException {

    // Create the configuration for the partner connection
    ConnectorConfig config = new ConnectorConfig();
    config.setUsername(USERNAME);
    config.setPassword(PASSWORD);

    // Initialize the connection
    connection = new PartnerConnection(config);

    SObject[] objectsToSearch = new SObject[2];
    String[] inputIds = new String[2];
    // Instantiate an empty Java SObject
    SObject searchCriteria = new SObject();
    // Set its type to Lead. This tells findDuplicatesByIds() to use the duplicate rules
    // for Lead
    searchCriteria.setType("Lead");
    /*
     * Set the necessary fields for matching, based on the standard matching rules for
Lead
     * (Search help.salesforce.com for "Standard Contact and Lead Matching Rule" to see
the
     * rules).
     */
```

```
    searchCriteria.setField("FirstName", "Marc");
    searchCriteria.setField("LastName", "Benioff");
    searchCriteria.setField("Company", "Salesforce.com Inc");
    searchCriteria.setField("Title", "CEO");
    searchCriteria.setField("Email", "ceo@salesforce.com");
    // Add the sObjects to the input array
    objectsToSearch[0] = searchCriteria;
    objectsToSearch[1] = searchCriteria;

    SaveResult[] saveResults = connection.create(objectsToSearch);

    for (int i = 0; i < saveResults.length; ++i) {
      if (saveResults[i].isSuccess()) {
        System.out.println("Successfully created ID: " + saveResults[i].getId());
        inputIds[i] = saveResults[i].getId();
      } else {
        System.out.println("Error: could not create SObject.");
        System.out.println("The error reported was: " +
          saveResults[i].getErrors()[0].getMessage() + "\n");
      }
    }
    /*
     * By default, findDuplicatesByIds() returns only record IDs. To return additional
values,
     * set the second parameter to true.
     */
    connection.setDuplicateRuleHeader(
        /*
         * @param allowSave - Not Applicable for this API call
         */
        false,
        /* @param includeRecordDetails */
        false,
        /*
         * @param runAsCurrentUser - Not Applicable for this API call
         */
        false);

    // Invoke findDuplicatesByIds() to find duplicates based on the information in the
    // SObject array
    FindDuplicatesResult[] callResults = connection.findDuplicatesByIds(inputIds);

    // Iterate through the results
    /* For each Id in the input array, get the duplicate results. There could be more
matches
     * depending on the data in the organization.
     */
    for (FindDuplicatesResult findDupeResult : callResults) {
      // If errors were found for this Id, print them out
      if (!findDupeResult.isSuccess()) {
        for (Error findDupError : findDupeResult.getErrors()) {
          System.out.println("FindDuplicatesRule errors detected: " +
findDupError.getMessage());
        }
```

```
      } else {
        /*
         * Get the DuplicateResult object array for the result. Each element in the array
 represents
        * the result of testing one duplicate rule for the Id. Process each DuplicateResult.

         */
        for (DuplicateResult dupeResult : findDupeResult.getDuplicateResults()) {
          System.out.println("Duplicate rule: " + dupeResult.getDuplicateRule());
          // Print out the name of the object associated with the duplicate
          // rule
          System.out.println("Source of this duplicate rule is: " +
            dupeResult.getDuplicateRuleEntityType());
          for (MatchResult matchResult : dupeResult.getMatchResults()) {
            if (!matchResult.isSuccess()) {
              for (Error e : matchResult.getErrors()) {
                System.out.println("Errors detected: " + e.getMessage());
              }
            } else {
              System.out.println("Matching rule is: " + matchResult.getRule());
              System.out.println("Object type for this matching rule is: " +
matchResult.getEntityType());
              for (MatchRecord matchRecord : matchResult.getMatchRecords()) {
                System.out.println("Duplicate record ID: " +
matchRecord.getRecord().getId());
              }
            }
          }
        }
      }
    }
  }
}
```

Arguments

Name	Type	Description
`IDs`	Array of ID	Required. A list of IDs that contain values you want to search for.

Response

An array of `FindDuplicatesResult` objects.

FindDuplicatesResult

Represents the result of a duplicate search for a single ID in the input array. Because the object associated with the sObject can have more than one duplicate rule, `FindDuplicatesResult` contains an array of DuplicateResult objects.

Fields

Field Name	Field Type	Description
duplicateResults	Array of DuplicateResult objects	The result of each duplicate rule applied by `findDuplicatesByIds()` to a single sObject.
errors	Array of Error objects	Contains an array of errors encountered by `findDuplicatesByIds()`.
success	boolean	This field is set to `true` if `findDuplicatesByIds()` doesn't encounter any errors.

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidFieldFault`

getDeleted()

Retrieves the list of individual records that have been deleted within the given timespan for the specified object.

Syntax

```
GetDeletedResult = connection.getDeleted(string sObjectType, dateTime startDate, dateTime
 EndDate);
```

Usage

Use `getDeleted()` for data replication applications to retrieve a list of records that have been deleted from your organization's data within the specified timespan. The `getDeleted()` call retrieves a GetDeletedResult object that contains an array of `DeletedRecord` objects containing the ID of each deleted record and the date/time (Coordinated Universal Time (UTC) time zone) on which it was deleted, using information from the `SystemModstamp` system field if available. Be sure to read Data Replication before using `getDeleted()` in your client applications. (For information on IDs, see ID Field Type.)

As of release 8.0, the `getDeleted()` call respects the user's sharing model.

Rules and Guidelines

When replicating deleted records, consider the following rules and guidelines:

- The specified `startDate` must chronologically precede the specified `endDate` value. The specified `startDate` cannot be the same value as, or later than, the specified `endDate` value. Otherwise, the API returns an `INVALID_REPLICATION_DATE` error.
- Records are returned only if the user has access to them.

- Results are returned for no more than 15 days previous to the day the call is executed (or earlier if an administrator has purged the Recycle Bin). If the purge has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned.
- If latestDateCovered is less than `endDate`, the call will fail, returning an `INVALID_REPLICATION_DATE` error with the value of latestDateCovered.
- Deleted records are written to a delete log, which `getDeleted()` accesses. A background process that runs every two hours purges records that have been in an organization's delete log for more than two hours if the number of records is above a certain limit. Starting with the oldest records, the process purges delete log entries until the delete log is back below the limit. This is done to protect Salesforce from performance issues related to massive delete logs. The limit is calculated using this formula:

  ```
  5000 * number of licenses in the organization
  ```

  For example, an organization with 1,000 licenses could have up to 5,000,000 (five million) records in the delete log before any purging took place. If purging has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned. If you get this exception, you should do a full pull of the table.

- If you delete a large numbers of records, your data replication should run more frequently than every two hours to ensure all records are returned by `getDeleted()`.
- Client applications typically poll for changed data periodically. For important polling considerations, see Polling for Changes.
- Records for certain objects cannot be replicated via the API. To replicate a record via the `getDeleted()` call, its object must be configured as replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your client application can invoke the `describeSObjects()` call on the object and inspect its `replicateable` property.
- Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.
- If you call `getDeleted()` for a history object, the call returns the records deleted during the given date range for all history objects, not only the history object you specified. For example, if you call `getDeleted()` for AccountHistory, you'll get records deleted during the given date range for AccountHistory, ContactHistory, and so on. However, `getDeleted()` calls on OpportunityHistory return only deleted OpportunityHistory records, not other associated deleted history objects.

Basic Steps for Replicating Deleted Records

You can replicate deleted records using the following basic steps for each object:

1. Optionally, determine whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getDeleted()`, passing in the object and the relevant time span for deleted records.
3. In the DeleteResult object, iterate through the returned array of `DeletedRecord` objects containing the ID of each deleted record and the date on which it was deleted (Coordinated Universal Time (UTC) time zone).
4. Take the appropriate action on the local data to remove the deleted records or flag as deleted.
5. Optionally, save the request time span for future reference. You should save the value of latestDateCovered.

A client application likely performs other tasks associated with data replication operations. For example, if an opportunity is closed, a client application might run a new revenue report. Similarly, if a task is completed, the process might log this in another system.

Sample Code—Java

This sample calls `getDeleted()` to get all accounts that were deleted in the last 60 minutes. It then writes the ID and the deleted date of each returned account to the console.

```
public void getDeletedRecords() {
   try {
      GregorianCalendar endTime = (GregorianCalendar)
         connection.getServerTimestamp().getTimestamp();
      GregorianCalendar startTime = (GregorianCalendar) endTime.clone();
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      startTime.add(GregorianCalendar.MINUTE, -60);
      System.out.println("Checking deletes at or after: "
            + startTime.getTime().toString());

      // Get records deleted during the specified time frame.
      GetDeletedResult gdResult = connection.getDeleted("Account",
            startTime, endTime);

      // Check the number of records contained in the results,
      // to check if something was deleted in the 60 minute span.
      DeletedRecord[] deletedRecords = gdResult.getDeletedRecords();
      if (deletedRecords != null && deletedRecords.length > 0) {
         for (int i = 0; i < deletedRecords.length; i++) {
            DeletedRecord dr = deletedRecords[i];
            System.out.println(dr.getId() + " was deleted on "
                  + dr.getDeletedDate().getTime().toString());
         }
      } else {
         System.out.println("No deletions of Account records in "
               + "the last 60 minutes.");
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `getDeleted()` to get all accounts that were deleted in the last 60 minutes. It then writes the ID and the deleted date of each returned account to the console.

```
public void getDeletedRecords()
{
   try
   {
      DateTime endTime = binding.getServerTimestamp().timestamp;
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      DateTime startTime = endTime.AddMinutes(-60);
      Console.WriteLine("Checking deletes at or after: "
            + startTime.ToLocalTime().ToString());
```

```
      // Get records deleted during the specified time frame.
      GetDeletedResult gdResult = binding.getDeleted("Account",
            startTime, endTime);

      // Check the number of records contained in the results,
      // to check if something was deleted in the 60 minute span.
      DeletedRecord[] deletedRecords = gdResult.deletedRecords;
      if (deletedRecords != null && deletedRecords.Length > 0)
      {
         for (int i = 0; i < deletedRecords.Length; i++)
         {
            DeletedRecord dr = deletedRecords[i];
            Console.WriteLine(dr.id + " was deleted on "
                  + dr.deletedDate.ToLocalTime().ToString());
         }
      }
      else
      {
         Console.WriteLine("No deletions of Account records in "
               + "the last 60 minutes.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                           e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`sObjectTypeEntityType`	string	Object type. The specified value must be a valid object for your organization. See sObject.
`startDate`	dateTime	Starting date/time (Coordinated Universal Time (UTC)—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:30:15 is interpreted as 12:30:00 UTC).
`endDate`	dateTime	Ending date/time (Coordinated Universal Time (UTC)—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:35:15 is interpreted as 12:35:00 UTC).

Limits

There are record limits on the result GetDeletedResult:

- If your `getDeleted()` call returns more than 600,000 records and the user is a system administrator, an exception EXCEEDED_ID_LIMIT is returned.

- If your getDeleted() call returns more than 20,000 records and the user is not a system administrator, an exception OPERATION_TOO_LARGE is returned. Note that this error is returned when more than 20,000 records across the organization have been deleted, not just the records viewable by the user.

You can correct the error by choosing start and end dates that are closer together.

Response

GetDeletedResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

Data Replication

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

GetDeletedResult

The getDeleted() call returns a GetDeletedResult object that contains an array of DeletedRecord records and two properties:

Name	Type	Description
earliestDateAvailable	dateTime	For the object type of the getDeleted() call, the timestamp (Coordinated Universal Time (UTC)—not local— timezone) of the last physically deleted object. If this value is less than endDate, the call will fail, and you should resynch your data before performing another replication.
deletedRecords[]	deletedRecords	Array of the deleted records which satisfy the start and end dates specified in the getDeleted() call.
latestDateCovered	dateTime	The timestamp (Coordinated Universal Time (UTC)—not local— time zone) of the last date covered in the getDeleted() call. If there is a value, it is less than or equal to endDate. A value here indicates that, for safety, you should use this value for the startDate of your next call to capture the changes that started after this date but did not complete before endDate and were, therefore, not returned in the previous call.

deletedRecords

The GetDeletedResult contains and array of deletedRecords, which contain the following properties:

Name	Type	Description
deletedDate	dateTime	Date and time (Coordinated Universal Time (UTC)—not local—timezone) when this record was deleted. This information is obtained using the SystemModstamp system field if available.
id	ID	ID of an sObject that has been deleted.

getUpdated()

Retrieves the list of individual records that have been updated (added or changed) within the given timespan for the specified object.

Syntax

```
GetUpdatedResult[] = connection.getUpdated(string sObjectType, dateTime startDate, dateTime
 EndDate);
```

Usage

Use `getUpdated()` for data replication applications to retrieve a set of IDs for objects of the specified object that have been created or updated within the specified timespan. The `getUpdated()` call retrieves an array of `GetUpdatedResult` objects containing the ID of each created or updated object and the date/time (Coordinated Universal Time (UTC) time zone) on which it was created or updated, respectively. Be sure to read Data Replication before using `getUpdated()` in your client application.

Note: The `getUpdated()` call retrieves the IDs only for objects to which the logged-in user has access.

Rules and Guidelines

When replicating created and updated objects, consider the following rules and guidelines:

- The specified `startDate` must chronologically precede the specified `endDate` value. The specified `startDate` cannot be the same value as, or later than, the specified `endDate` value. Otherwise, the API returns an `INVALID_REPLICATION_DATE` error.
- Results are returned for no more than 30 days previous to the day the call is executed.
- Client applications typically poll for changed data periodically. For important polling considerations, see Polling for Changes.
- Your client application can replicate any objects to which it has sufficient permissions. For example, to replicate all data for your organization, your client application must be logged in with "View All Data" access rights to the specified object. Similarly, the objects must be within your sharing rules. For more information, see Factors that Affect Data Access.
- Certain objects cannot be replicated via the API. To replicate an object via the `getUpdated()` call, its object must be configured as replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your client application can invoke the `describeSObjects()` call on the object and inspect its `replicateable` property.
- Certain objects cannot be deleted, such as Group, User, Contract, or Product2 objects. However, if instances of these objects are no longer visible in the Salesforce user interface, they may have been rendered inactive so that only users with administrative access can see them. To determine whether a missing object instance has been made inactive, your client application can call `getUpdated()` and check the object's active flag.

- Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.

Basic Steps for Replicating Updated Objects

Replicating objects involves the following basic steps for each object that you want to replicate:

1. Optionally, the client application determines whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getUpdated()`, passing in the object and timespan for which to retrieve data.
3. Iterate through the returned array of IDs. For each ID element in the array, call `retrieve()` to obtain the latest information you want from the associated object. Your client application must then take the appropriate action on the local data, such as inserting new rows or updating existing ones with the latest information.
4. Optionally, the client application saves the request timestamp for future reference.

A client application likely performs other tasks associated with data replication operations. For example, if an opportunity were to become closed, a client application might run a new revenue report. Similarly, if a task were completed, the process might log this somehow in another system.

Sample Code—Java

This sample gets the accounts that were updated in the last 60 minutes and writes their IDs to the console.

```
public void getUpdatedRecords() {
   try {
      GregorianCalendar endTime = (GregorianCalendar) connection
            .getServerTimestamp().getTimestamp();
      GregorianCalendar startTime = (GregorianCalendar) endTime.clone();
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      startTime.add(GregorianCalendar.MINUTE, -60);
      System.out.println("Checking updates as of: "
            + startTime.getTime().toString());

      // Get the updated accounts within the specified time frame
      GetUpdatedResult ur = connection.getUpdated("Account", startTime,
            endTime);
      System.out.println("GetUpdateResult: " + ur.getIds().length);

      // Write the results
      if (ur.getIds() != null && ur.getIds().length > 0) {
         for (int i = 0; i < ur.getIds().length; i++) {
            System.out.println(ur.getIds()[i] + " was updated between "
                  + startTime.getTime().toString() + " and "
                  + endTime.getTime().toString());
         }
      } else {
         System.out.println("No updates to accounts in "
               + "the last 60 minutes.");
      }
   } catch (ConnectionException ce) {
```

```
        ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample gets the accounts that were updated in the last 60 minutes and writes their IDs to the console.

```
public void getUpdatedRecords()
{
   try
   {
      DateTime endTime = binding.getServerTimestamp().timestamp;
      // Subtract 60 minutes from the server time so that we have
      // a valid time frame.
      DateTime startTime = endTime.AddMinutes(-60);
      Console.WriteLine("Checking updates as of: "
            + startTime.ToLocalTime().ToString());

      // Get the updated accounts within the specified time frame
      GetUpdatedResult ur = binding.getUpdated("Account", startTime,
            endTime);
      Console.WriteLine("GetUpdateResult: " + ur.ids.Length);

      // Write the results
      if (ur.ids != null && ur.ids.Length > 0)
      {
         for (int i = 0; i < ur.ids.Length; i++)
         {
            Console.WriteLine(ur.ids[i] + " was updated between "
                  + startTime.ToLocalTime().ToString() + " and "
                  + endTime.ToLocalTime().ToString());
         }
      }
      else
      {
         Console.WriteLine("No updates to accounts in "
               + "the last 60 minutes.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
sObjectTypeEntityType	string	Object type. The specified value must be a valid object for your organization. For a list of standard objects, see Standard Objects.
startDate	dateTime	Starting date/time (Coordinated Universal Time (UTC) time zone—not local—timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:30:15 is interpreted as 12:30:00 UTC).
endDate	dateTime	Ending date/time (Coordinated Universal Time (UTC) time zone—not local— timezone) of the timespan for which to retrieve the data. The API ignores the seconds portion of the specified dateTime value (for example, 12:35:15 is interpreted as 12:35:00 UTC).

Important: There is a limit of 600,000 IDs in the result GetUpdatedResult[]. If your `getUpdated()` call returns more than 600,000 IDs, an exception EXCEEDED_ID_LIMIT is returned. You can correct the error by choosing start and end dates that are closer together.

Response

GetUpdatedResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

- Data Replication
- API Call Basics
- https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

GetUpdatedResult

The `getUpdated()` call returns a `GetUpdatedResult` object that contains information about each record that was inserted or updated within the given timespan. An `GetUpdatedResult` object has the following properties:

Name	Type	Description
id[]	ID	Array of IDs of each object that has been updated.
latestDateCovered	dateTime	The timestamp (Coordinated Universal Time (UTC)—not local— time zone) of the last date covered in the `getUpdated()` call. If there is a value, it is less than or equal to `endDate`. A value here indicates that, for safety, you should use this value for the `startDate` of your next call to capture the changes that started after this date but

Name	Type	Description
		did not complete before the endDate and were, therefore, not returned in the previous call. **Note:** If Salesforce executes a long-running transaction on your instance, the value in this field is the start time of that long-running transaction until it completes. This is because a long-running transaction might affect your user data (for example, batch processing).

invalidateSessions()

Ends one or more sessions specified by a sessionId.

Syntax

```
InvalidateSessionsResult = connection.invalidateSessions(string[] sessionIds);
```

Usage

Use this call to end one or more sessions.

You can also use logout() to end just one session, the session of the logged-in user.

Sample Code—Java

This sample invalidates a set of sessions. The method in this sample takes an array of session IDs passed in as String values. The method then calls `invalidateSessions()` with this array and then checks the results for any errors.

```
public void invalidateSessionsSample(String[] sessionIds) {
   try {
      InvalidateSessionsResult[] results;
      results = connection.invalidateSessions(sessionIds);
      for (InvalidateSessionsResult result : results) {
         // Check results for errors
         if (!result.isSuccess()) {
            if (result.getErrors().length > 0) {
               System.out.println("Status code: "
                     + result.getErrors()[0].getStatusCode());
               System.out.println("Error message: "
                     + result.getErrors()[0].getMessage());
            }
         } else {
            System.out.println("Success.");
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
```

```
    }
}
```

Sample Code—C#

This sample invalidates a set of sessions. The method in this sample takes an array of session IDs passed in as String values. The method then calls `invalidateSessions()` with this array and then checks the results for any errors.

```
public void invalidateSessionsSample(string[] sessionIds)
{
   try
   {
      InvalidateSessionsResult[] results;
      results = binding.invalidateSessions(sessionIds);
      foreach (InvalidateSessionsResult result in results)
      {
         // Check results for errors
         if (!result.success)
         {
            if (result.errors.Length > 0)
            {
               Console.WriteLine("Status code: " +
                  result.errors[0].statusCode);
               Console.WriteLine("Error message: " +
                  result.errors[0].message);
            }
         }
         else
         {
            Console.WriteLine("Success.");
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                      e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`sessionIds`	string[]	One or more `sessionId` strings. Limit 200. You can obtain your `sessionId` from the SessionHeader.

Response

InvalidateSessionsResult[]

Faults

UnexpectedErrorFault

InvalidateSessionsResult

The `invalidateSessions()` call returns an array of `LogoutResult` objects. Each object has the following properties:

Name	Type	Description
`success`	boolean	Indicates whether the session was successfully terminated (`true`) or not (`false`).
`errors`	Error[]	If an error occurred during the call, an array of one or more Error objects. Each object contains an error code and description.

`login()`

Logs in to the login server and starts a client session.

Note: `login()` calls count toward your API usage limits.

Syntax

```
LoginResult = connection.login(string username, string password);
```

Usage

Use the `login()` call to log in to the login server and start a client session. A client application must log in and obtain a `sessionId` and server URL before making other API calls.

When a client application invokes the `login()` call, it passes in a username and password as user credentials. Upon invocation, the API authenticates the credentials . It then returns the `sessionId`, the user ID associated with the logged-in username, and a URL that points to the Lightning Platform API to use in all subsequent API calls.

Salesforce checks the IP address from which the client application is logging in, and blocks logins from unknown IP addresses. For a blocked login via the API, Salesforce returns a login fault. Then, the user must add their security token to the end of their password in order to log in. A security token is an automatically-generated key from Salesforce. For example, if a user's password is *`mypassword`*, and their security token is *`XXXXXXXXXX`*, then the user must enter *`mypasswordXXXXXXXXXX`* to log in. Users can obtain their security token by changing their password or resetting their security token via the Salesforce user interface. When a user changes their password or resets their security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until a user resets their security token, changes their password, or has their password reset. When the security token is invalid, the user must repeat the login process to log in. To avoid this, the administrator can make sure the client's IP address is added to the organization's list of trusted IP addresses. For more information, see Security Token.

After logging in, make sure that your client application performs these tasks:

- Sets the session ID in the SOAP header so that the API can validate subsequent requests for this session.
- Specifies the server URL as the target for subsequent service requests. The login server supports only login calls.

Development tools differ in the way you specify session headers and server URLs. For more information, see the documentation for your particular development tool.

Note: Multiple client applications can log in using the same `username` argument. However, this approach increases your risk of getting errors due to query limits. A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

The limit is 3600 calls to `login()` per user per hour. Exceeding this limit results in a "Login Rate Exceeded" error.

Enterprise and Partner Endpoints

In API version 11.1 and earlier, client applications built with the partner WSDL can send requests to the enterprise endpoint and enterprise WSDL applications can send requests to the partner endpoint. Beginning with version 12.0, this functionality is not supported.

Sandbox Endpoints

If you're logging in to a sandbox org, use an endpoint based off `test.salesforce.com` instead of `login.salesforce.com`.

Logging In When Using a Proxy

If you log in to Salesforce via a proxy, set the proxy host and port on the instance of the ConnectorConfig class that you use to log in. Optionally, set the username and password if you must authenticate on the proxy.

```
ConnectorConfig config = new ConnectorConfig();
config.setUsername(userId);
config.setPassword(passwd);
config.setAuthEndpoint(authEndPoint);
config.setProxy(proxyHost, proxyPort);
// Set the username and password if your proxy must be authenticated
config.setProxyUsername(proxyUsername);
config.setProxyPassword(proxyPassword);
try {
   EnterpriseConnection connection = new EnterpriseConnection(config);
   // etc.
} catch (ConnectionException ce) {
  ce.printStackTrace();
}
```

Session Expiration

Client applications do not need to explicitly log out to end a session. Sessions expire automatically after a predetermined length of inactivity, which can be configured in Salesforce from Setup by clicking **Security Controls**. The default is 120 minutes (two hours). If you make an API call, the inactivity timer is reset to zero.

Authenticating Active Self-Service Users

Note: Starting with Spring '12, the Self-Service portal isn't available for new orgs. Existing orgs continue to have access to the Self-Service portal.

To authenticate active Self-Service users, use the LoginScopeHeader to specify the Organization ID against which Self-Service users are authenticated. A Self-Service user must exist and be active before being authenticated (see SelfServiceUser).

Authenticating Customer Community Users in Salesforce Communities

To authenticate an active community user who has the "API Enabled" permission, use the LoginScopeHeader to specify the Organization ID of the org with communities. Community users must exist, be active, and belong to communities in the organization before being authenticated.

Client applications can send login requests to one of the following endpoints (using valid values for the authentication endpoint).

Enterprise WSDL:

- `String authEndPoint = "https://login.salesforce.com/services/Soap/c/37.0/"`
- `String authEndPoint = "https://community-domain/path-prefix/Soap/c/37.0/"`

Partner WSDL:

- `String authEndPoint = "https://login.salesforce.com/services/Soap/u/37.0/"`
- `String authEndPoint = "https://community-domain/path-prefix/Soap/u/37.0/"`

Logging Out

Salesforce recommends that you always call `logout()` to end a session when it is no longer needed. This call ends any child sessions in addition to the session being logged out. Logging out instead of waiting for the configured session expiration provides the most protection.

Sample Code—Java

This sample logs a user in with the specified username, password, and authentication endpoint URL. The sample writes user and session information to the console after a successful login. Before running this sample, replace the values for username, password, and authentication endpoint with valid values.

To learn how to generate and import the web service WSDL needed to make API calls, see Step 2: Generate or Obtain the Web Service WSDL in the Quick Start.

```
public boolean loginSample() {
   boolean success = false;
   String username = "username";
   String password = "password";
   String authEndPoint = "https://login.salesforce.com/services/Soap/c/24.0/";

   try {
      ConnectorConfig config = new ConnectorConfig();
      config.setUsername(username);
      config.setPassword(password);

      System.out.println("AuthEndPoint: " + authEndPoint);
      config.setAuthEndpoint(authEndPoint);

      connection = new EnterpriseConnection(config);

      // Print user and session info
      GetUserInfoResult userInfo = connection.getUserInfo();
```

```
      System.out.println("UserID: " + userInfo.getUserId());
      System.out.println("User Full Name: " + userInfo.getUserFullName());
      System.out.println("User Email: " + userInfo.getUserEmail());
      System.out.println();
      System.out.println("SessionID: " + config.getSessionId());
      System.out.println("Auth End Point: " + config.getAuthEndpoint());
      System.out
            .println("Service End Point: " + config.getServiceEndpoint());
      System.out.println();

      success = true;
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }

   return success;
}
```

Sample Code—C#

This sample logs a user in using the specified username and password. The result of the login call contains the service endpoint URL, which is the virtual server instance that's servicing your organization, and a unique session ID. The sample sets these returned values on the binding. It sets the binding URL to the returned service endpoint. It also sets the session ID on the session header that is used on all API calls. Next, the sample writes user and session information to the console after a successful login. Before running this sample, replace the values for user name and password with valid values.

To learn how to generate and import the web service WSDL needed to make API calls, see Step 2: Generate or Obtain the Web Service WSDL in the Quick Start.

```
public bool loginSample()
{
   Boolean success = false;
   string username = "username";
   string password = "password";

   // Create a service object
   binding = new SforceService();

   LoginResult lr;
   try
   {
      Console.WriteLine("\nLogging in...\n");
      lr = binding.login(username, password);

      /**
         * The login results contain the endpoint of the virtual server instance
         * that is servicing your organization. Set the URL of the binding
         * to this endpoint.
         */
      // Save old authentication end point URL
      String authEndPoint = binding.Url;
      // Set returned service endpoint URL
      binding.Url = lr.serverUrl;
```

```
      /** Get the session ID from the login result and set it for the
         * session header that will be used for all subsequent calls.
         */
      binding.SessionHeaderValue = new SessionHeader();
      binding.SessionHeaderValue.sessionId = lr.sessionId;

      // Print user and session info
      GetUserInfoResult userInfo = lr.userInfo;
      Console.WriteLine("UserID: " + userInfo.userId);
      Console.WriteLine("User Full Name: " +
            userInfo.userFullName);
      Console.WriteLine("User Email: " +
            userInfo.userEmail);
      Console.WriteLine();
      Console.WriteLine("SessionID: " +
            lr.sessionId);
      Console.WriteLine("Auth End Point: " +
            authEndPoint);
      Console.WriteLine("Service End Point: " +
            lr.serverUrl);
      Console.WriteLine();

      // Return true to indicate that we are logged in, pointed
      // at the right URL and have our security token in place.
      success = true;
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
   }
   return success;
}
```

Arguments

Name	Type	Description
`username`	string	Login `username`.
`password`	string	Login password associated with the specified `username`.

The login request size is limited to 10 KB.

Response

LoginResult

Faults

`LoginFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

LoginResult

The `login()` call returns a `LoginResult` object, which has the following properties:

Name	Type	Description
`metadataServerUrl`	string	URL of the endpoint that will process subsequent metadata API calls. Your client application needs to set the endpoint.
`passwordExpired`	boolean	Indicates whether the password used during the login attempt is expired (`true`) or not (`false`). If the password has expired, then the API returns a valid `sessionId`, but the only allowable operation is the `setPassword()` call.
`serverUrl`	string	URL of the endpoint that will process subsequent API calls. Your client application needs to set the endpoint.
`sessionId`	string	Unique ID associated with this session. Your client application needs to set this value in the session header.
`userId`	ID	ID of the user associated with the specified username and password.
`userInfo`	getUserInfoResult	User information fields. For a list of these fields, see getUserInfoResult.

`logout()`

Ends the session of the logged-in user.

Syntax

```
connection.logout();
```

Usage

This call ends the session for the logged-in user issuing the call. No arguments are needed.

To end one or more sessions started by someone other than the logged-in user, see `invalidateSessions()`.

Sample Code—Java

This sample calls `logout()` to log the current user out and writes a message to the console.

```
public void logoutSample() {
   try {
      connection.logout();
      System.out.println("Logged out.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `logout()` to log the current user out and writes a message to the console.

```
public void logoutSample()
{
   try
   {
      binding.logout();
      Console.WriteLine("Logged out.");
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

This call uses no arguments. It ends the session for the logged-in user issuing the call, so no arguments are needed. The logged-in user is identified by the `sessionId` specified in the SessionHeader for this call.

Response

Void is returned. Because failure of the call means that the session has already been logged out, no results are needed. Any unexpected error, such as system unavailability, throws an error that should be handled by your client application.

Faults

`UnexpectedErrorFault`

merge()

Combines up to 3 records of the same type into 1 record. The input is an array of `MergeRequest` elements, each of which specifies the records to combine. The output is a MergeResult object that contains information about the result of the merge.

Syntax

```
MergeResult[]= connection.merge(MergeRequest[] mergeRequests);
```

Usage

Use `merge()` to combine records of the same object type into one of the records, known as the *master record*. `merge()` deletes the other records, known as the *victim records*. If a victim record has related records, `merge()` makes the master record the new parent of the related records.

Rules and Guidelines

Values from non-master records

Before you call `merge()`, decide if you want field values in the non-master records to supersede the master record values. If you do, set the field names and values in the record identified by the `masterRecord` of the `MergeRequest`.

Contacts, Leads, and Data Privacy Records

When you merge contacts or leads that have corresponding data privacy records based on the Individual object, `merge()` determines the correct data privacy record to associate with the master record.

- If you selected the option to retain the most recently updated data privacy record for merging leads and contacts, `merge()` selects the most recently updated data privacy record.
- Otherwise, `merge()` selects the data privacy record already associated with the master record.

Successive merges

Because `merge()` handles each `MergeResult` element in the input argument as a separate transaction, you can successively merge several records into the same master record.

To perform successive merges, call `merge()` with an array of `MergeResult` elements. For each `MergeResult` element, set:

- `masterRecord` to the master record ID.
- Each element in the `recordToMergeIds` array to the ID of a record you want to combine into the master.

Deleted records

Use `queryAll()` to view records that have been deleted during a merge.

List merged records

To find all records that have been merged since a given point in time, call `queryAll()` with a SELECT statement. For example:

```
SELECT Id FROM Contact WHERE isDeleted=true and masterRecordId != null
   AND SystemModstamp > 2006-01-01T23:01:01+01:00
```

Supported Object Types

The supported object types are Lead, Contact, Account, and Person Account. You can only merge objects of the same type. For example, Leads can be merged only with Leads.

Account Hierarchies

When you merge accounts that are part of an account hierarchy, `merge()` tries to set the victims' child records as children of the master. If this action causes a cyclical relationship, `merge()` returns an error.

Contacts Reports To relationships

When you merge contacts that have a value for the `ReportsToId` field, `merge()` tries to add the victims' `ReportsToId` value to the master. If this action causes a cyclical relationship, `merge()` reports an error.

Contacts and portal users

When you want to merge a contact victim record that has an associated portal user, set `AdditionalInformationMap` for victim record's `MergeRequest` element. You can only merge 1 victim with a portal user into the master. In Salesforce Classic, you can't merge person accounts that are enabled to use a Customer Portal.

Considerations

The following limits apply to any merge request:

- Up to 200 merge requests can be made in a single SOAP call.
- Up to three records can be merged in a single request, including the master record. This limit is the same as the limit enforced by the Salesforce user interface. To merge more than 3 records, do a successive merge.
- External ID fields cannot be used with `merge()`.
- If you selected the option to retain the most recently updated data privacy record for merging leads and contacts, but the caller does not have CRUD permission for the selected data privacy record, the merge process selects the data privacy record already associated with the master record.

Redundant relationships

You can't merge accounts or person accounts that are related to the same contact. Remove redundant account-contact relationships before you try to merge accounts.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Sample Code—Java

This sample merges a victim account with a master account. It creates 2 accounts and attaches a note to the victim. After the merge, the code prints the ID of the victim account and the number of child records updated. In this example, the number of updated records is one, because the note of the merged account is moved to the master.

```
public Boolean mergeRecords() {
   Boolean success = false;
   // Array to hold the results
   String[] accountIds = new String[2];
   try {
      // Create two accounts to merge
      Account[] accounts = new Account[2];
      Account masterAccount = new Account();
      masterAccount.setName("MasterAccount");
      masterAccount.setDescription("The Account record to merge with.");
      accounts[0] = masterAccount;
      Account accountToMerge = new Account();
      accountToMerge.setName("AccountToMerge");
      accountToMerge
            .setDescription("The Account record that will be merged.");
      accounts[1] = accountToMerge;
      SaveResult[] saveResults = connection.create(accounts);

      if (saveResults.length > 0) {
         for (int i = 0; i < saveResults.length; i++) {
            if (saveResults[i].isSuccess()) {
               accountIds[i] = saveResults[i].getId();
               System.out.println("Created Account ID: "
```

```
                + accountIds[i]);
        } else {
            // If any account is not created,
            // print the error returned and exit
            System.out
                .println("An error occurred while creating account."
                    + " Error message: "
                    + saveResults[i].getErrors()[0].getMessage());
            return success;
        }
    }
}

// Set the Ids of the accounts
masterAccount.setId(accountIds[0]);
accountToMerge.setId(accountIds[1]);

// Attach a note to the account to be merged with the master,
// which will get re-parented after the merge
Note note = new Note();
System.out.println("Attaching note to record " +
      accountIds[1]);
note.setParentId(accountIds[1]);
note.setTitle("Merged Notes");
note.setBody("This note will be moved to the "
      + "MasterAccount during merge");
SaveResult[] sRes = connection.create(new SObject[] { note });
if (sRes[0].isSuccess()) {
   System.out.println("Created Note record.");
} else {
   Error[] errors = sRes[0].getErrors();
   System.out.println("Could not create Note record: "
         + errors[0].getMessage());
}

// Perform the merge
MergeRequest mReq = new MergeRequest();
masterAccount.setDescription("Was merged");
mReq.setMasterRecord(masterAccount);
mReq.setRecordToMergeIds(new String[] { saveResults[1].getId() });
MergeResult mRes = connection.merge(new MergeRequest[] { mReq })[0];

if (mRes.isSuccess())
{
   System.out.println("Merge successful.");
   // Write the IDs of merged records
   for(String mergedId : mRes.getMergedRecordIds()) {
      System.out.println("Merged Record ID: " + mergedId);

   }
   // Write the updated child records. (In this case the note.)
   System.out.println(
         "Child records updated: " + mRes.getUpdatedRelatedIds().length);
   success = true;
```

```
      } else {
         System.out.println("Failed to merge records. Error message: " +
               mRes.getErrors()[0].getMessage());
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return success;
}
```

Sample Code—C#

This sample merges a victim account with a master account. It creates 2 accounts and attaches a note to the victim. After the merge, the code prints the ID of the victim account and the number of child records updated. In this example, the number of updated records is one, because the note of the merged account is moved to the master.

```
public Boolean mergeRecords()
{
   Boolean success = false;
   // Array to hold the results
   String[] accountIds = new String[2];
   try
   {
      // Create two accounts to merge
      Account[] accounts = new Account[2];
      Account masterAccount = new Account();
      masterAccount.Name = "MasterAccount";
      masterAccount.Description = "The Account record to merge with.";
      accounts[0] = masterAccount;
      Account accountToMerge = new Account();
      accountToMerge.Name = "AccountToMerge";
      accountToMerge
            .Description = "The Account record that will be merged.";
      accounts[1] = accountToMerge;
      SaveResult[] saveResults = binding.create(accounts);

      if (saveResults.Length > 0)
      {
         for (int i = 0; i < saveResults.Length; i++)
         {
            if (saveResults[i].success)
            {
               accountIds[i] = saveResults[i].id;
               Console.WriteLine("Created Account ID: "
                     + accountIds[i]);
            }
            else
            {
               // If any account is not created,
               // print the error returned and exit
               Console.WriteLine("An error occurred while creating account."
                           + " Error message: "
                           + saveResults[i].errors[0].message);
```

```
                return success;
            }
        }
    }

    // Set the Ids of the accounts
    masterAccount.Id = accountIds[0];
    accountToMerge.Id = accountIds[1];

    // Attach a note to the account to be merged with the master,
    // which will get re-parented after the merge
    Note note = new Note();
    Console.WriteLine("Attaching note to record " +
          accountIds[1]);
    note.ParentId = accountIds[1];
    note.Title = "Merged Notes";
    note.Body = "This note will be moved to the "
          + "MasterAccount during merge";
    SaveResult[] sRes = binding.create(new sObject[] { note });
    if (sRes[0].success)
    {
       Console.WriteLine("Created Note record.");
    }
    else
    {
       Error[] errors = sRes[0].errors;
       Console.WriteLine("Could not create Note record: "
             + errors[0].message);
    }

    // Perform the merge
    MergeRequest mReq = new MergeRequest();
    masterAccount.Description = "Was merged";
    mReq.masterRecord = masterAccount;
    mReq.recordToMergeIds = new String[] { saveResults[1].id };

    MergeResult mRes = binding.merge(new MergeRequest[] { mReq })[0];

    if (mRes.success)
    {
       Console.WriteLine("Merge successful.");
       // Write the IDs of merged records
       foreach (String mergedId in mRes.mergedRecordIds)
       {
          Console.WriteLine("Merged Record ID: " + mergedId);
       }
       // Write the updated child records. (In this case the note.)
       Console.WriteLine(
             "Child records updated: " + mRes.updatedRelatedIds.Length);
       success = true;
    }
    else
    {
       Console.WriteLine("Failed to merge records. Error message: " +
```

```
                mRes.errors[0].message);
         }
      }
      catch (SoapException e)
      {
         Console.WriteLine("An unexpected error has occurred: " +
                                     e.Message + "\n" + e.StackTrace);
      }
      return success;
}
```

Arguments

This call accepts an array of MergeRequest objects. A MergeRequest object contains the following properties.

Name	Type	Description
`masterRecord`	sObject	Required. Must provide the ID of the object that other records will be merged into. Optionally, provide the fields to be updated and their values.
`recordToMergeIds`	ID[]	Required. Minimum of one, maximum of two. The other record or records to be merged into the master record.

`AdditionalInformationMap`	map	A field-value map.
		• Merge a portal user ID:
		  – name: `PortalUserId`
		  – value: ID of the portal user
		• In all other merge cases, set to `null`.

Response

`MergeResult[]`

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`InvalidIdFault`

SEE ALSO:

API Call Basics

MergeResult

The `merge()` call returns a MergeResult object, which has the following properties:

Name	Type	Description
errors	Error[]	If an error occurred during the merge() call, an array of one or more Error objects providing the error code and description.
id	ID	ID of the master record, the record into which the other records were merged.
mergedRecordIds	ID[]	ID of the records that were merged into the master record. If successful, the values match mergeRequest.recordToMergeIds.
success	boolean	Indicates whether the merge was successful (true) or not (false).
updatedRelatedIds	ID[]	ID of all related records that were moved (reparented) as a result of the merge, and that are viewable by the user sending the merge call.

performQuickActions()

Executes quick actions of type create or update.

Syntax

```
PerformQuickActionResult[] = connection.performQuickActions(PerformQuickActionRequest
PerformQuickActionRequest[]);
```

Usage

Use the performQuickActions() call to perform a specific quick action. Returns an array of PerformQuickActionResult objects.

Note: If you're accessing the API using a custom community URL and you use the performQuickActions() call to create a group, the group is only available within that community.

Note: The OutgoingEmail entity can be created only via calls from the performQuickAction API.

Sample—Java

This sample uses a quick action to create a new contact.

```
public void example() throws Exception {

    PerformQuickActionRequest req = new PerformQuickActionRequest();

    Contact con = new Contact();
    con.setLastName("Smith");

    req.setQuickActionName("Account.QuickCreateContact");
    req.setParentId("001D000000JSaHa");
/* For version 29.0 and greater, use setContextId */
    req.setRecords(new SObject[] { con });  //you can only save one record here
    PerformQuickActionResult[] pResult =
        conn.performQuickActions(new PerformQuickActionRequest[] { req } );
```

```
    for(PerformQuickActionResult pr : pResult) {
        assert pr.getSuccess();
        assert pr.getCreated();
        assert pr.getErrors().length == 0;
        System.out.println("Id of the record created: " + pr.getIds()[0]);
        System.out.println("Id of the feeditem for action performed: " +
            pr.getFeedItemIds()[0]);
    }
}
```

Arguments

Name	Type	Description
quickActions	PerformQuickActionRequest	The action request to perform.

PerformQuickActionRequest

Name	Type	Description
parentOrContextId	ID	• In API version 28.0, parentId is the ID of the sObject on which to create a record for the request. • In API version 29.0 and greater, contextId is the ID of the context on which to create a record for the request.
quickActionName	string	The parent or context sObject and action name—for example, Opportunity.QuickCreateOpp.
records	SObject[]	The record to be created. Only one record can be saved at a time.

Response

PerformQuickActionResult

PerformQuickActionResult

The performQuickActions() call returns an array of PerformQuickActionResult objects.

Name	Type	Description
created	boolean	If true, the record was created successfully and if false, no record was created.
errors	Error[]	If an error occurred during the call, an array of one or more Error objects providing the error information.

Name	Type	Description
`feedItemIds`	ID[]	Returns an array of unique identifiers of a feed item in the form of a string with IDs; in partner portals, a type with an ID is returned.
`ids`	ID[]	An array of IDs.
`success`	boolean	If `true`, the action executed successfully and if `false`, the action failed.
`successMessage`	string	Returns the message that displays to the user upon successful completion of the action.

process()

Submits an array of approval process instances for approval, or processes an array of approval process instances to be approved, rejected, or removed. For more information, see “Set Up an Approval Process” in the Salesforce Help.

Syntax

```
ProcessResult = connection.process( processType processRequest[])
```

`processType` can be either ProcessSubmitRequest or ProcessWorkitemRequest

Usage

Use the `process()` call to perform either of the following two tasks:

- Submit an array of objects to the approval process. Objects cannot already be in an approval process when submitted. Use the ProcessSubmitRequest signature.
- Process an object that has been submitted to the approval process by performing an approval action (Approve or Reject). Use the ProcessWorkitemRequest signature.

Requests are processed and a ProcessResult is returned with the same process instances as sent in the request.

The failure of a particular record will not cause failure of the entire request.

Note: Because you can fire Apex triggers with this call, you may be updating fields that contain strings.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Sample Code—Java

This sample accepts the ID of the sObject to process the approval for and an array containing the IDs of the next approvers. It creates a process approval request and submits it for approval. Finally, it parses the results of the `process()` call.

```
public void processRecords(String id, String[] approverIds) {
   ProcessSubmitRequest request = new ProcessSubmitRequest();
   request.setComments("A comment about this approval.");
   request.setObjectId(id);
   request.setNextApproverIds(approverIds);
```

```
   try {
      ProcessResult[] processResults = connection
            .process(new ProcessSubmitRequest[] { request });
      for (ProcessResult processResult : processResults) {
         if (processResult.isSuccess()) {
            System.out.println("Approval submitted for: " + id + ":");
            for (int i = 0; i < approverIds.length; i++) {
               System.out
                     .println("\tBy: " + approverIds[i] + " successful.");
            }
            System.out.println("Process Instance Status: "
                  + processResult.getInstanceStatus());
         } else {
            System.out.println("Approval submitted for: " + id
                  + ", approverIds: " + approverIds.toString() + " FAILED.");
            System.out.println("Error: "
                  + processResult.getErrors().toString());
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts the ID of the sObject to process the approval for and an array containing the IDs of the next approvers. It creates a process approval request and submits it for approval. Finally, it parses the results of the `process()` call.

```
public void processRecords(String id, String[] approverIds)
{
   ProcessSubmitRequest request = new ProcessSubmitRequest();
   request.comments = "A comment about this approval.";
   request.objectId = id;
   request.nextApproverIds = approverIds;
   try
   {
      ProcessResult[] processResults = binding.process(
                  new ProcessSubmitRequest[] { request });
      foreach (ProcessResult processResult in processResults)
      {
         if (processResult.success)
         {
            Console.WriteLine("Approval submitted for: " + id + ":");
            for (int i = 0; i < approverIds.Length; i++)
            {
               Console.WriteLine("\tBy: " + approverIds[i] + " successful.");
            }
            Console.WriteLine("Process Instance Status: "
                  + processResult.instanceStatus);
         }
         else
         {
```

```
            Console.WriteLine("Approval submitted for: " + id
                  + ", approverIds: " + approverIds.ToString() + " FAILED.");
            Console.WriteLine("Error: "
                  + processResult.errors.ToString());
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
   }
}
```

ProcessSubmitRequest Arguments

Name	Type	Description
`comments`	string	Text that you want to accompany the submission. Don't reference merge fields or formula expressions. Submission comments appear in the approval history for the specified record. This text also appears in the initial approval request email if the template uses the `{!ApprovalRequest.Comments}` merge field.
`nextApproverIds`	ID[]	If the process requires specification of the next approval, the ID of the user to be assigned the next request.
`objectId`	ID	The record to submit for approval.
`processDefinitionNameOrId`	string	The unique name or ID of the specific approval process to which you want the record to be submitted. The process must have the same object type as the record you specified in `objectId`. Required if `skipEntryCriteria` is *true*.
`skipEntryCriteria`	boolean	If *true*, the record isn't evaluated against the entry criteria set on the process that is defined in `processDefinitionNameOrId`.
`submitterId`	ID	The ID for the user who submitted the record for approval. The user receives notifications about responses to the approval request. The user must be one of the allowed submitters for the process.

ProcessWorkitemRequest Arguments

Name	Type	Description
`action`	string	For processing an item after being submitted for approval, a string representing the kind of action to take: Approve, Reject, or Remove. Only system administrators can

Name	Type	Description
		specify Remove. If the **Allow submitters to recall approval requests** option is selected for the approval process, the submitter can also specify Remove.
`comments`	string	Text that you want to accompany the submission. Don't reference merge fields or formula expressions. Submission comments appear in the approval history for the specified record. This text also appears in the initial approval request email if the template uses the `{!ApprovalRequest.Comments}` merge field.
`nextApproverIds`	ID[]	If the process requires specification of the next approval, the ID of the user to be assigned the next request.
`workitemId`	ID	The ID of the ProcessInstanceWorkitem that is being approved, rejected, or removed.

Response

ProcessResult[]

Faults

`ALREADY_IN_PROCESS`

`NO_APPLICABLE_PROCESS`

SEE ALSO:

API Call Basics

ProcessResult

The `process()` call returns a ProcessResult object, which has the following properties, depending on the type of call (submit for approval or process object already submitted to for approval):

Name	Type	Description
`actorIds`	ID[]	IDs of the users who are currently assigned to this approval step.
`entityId`	ID	The object being processed.
`errors`	Error[]	The set of errors returned if the request failed.
`instanceId`	ID	The ID of the ProcessInstance associated with the object submitted for processing.
`instanceStatus`	string	The status of the current process instance (not an individual object but the entire process instance). The valid values are "Approved," "Rejected," "Removed," or "Pending."
`newWorkItemIds`	ID[]	Case-insensitive IDs that point to ProcessInstanceWorkitem items (the set of pending approval requests).

Name	Type	Description
success	boolean	true if processing or approval completed successfully.

query()

Executes a query against the specified object and returns data that matches the specified criteria.

Syntax

```
QueryResult = connection.query(string queryString);
```

Usage

Use the query() call to retrieve data from an object. When a client application invokes the query() call, it passes in a query expression that specifies the object to query, the fields to retrieve, and any conditions that determine whether a given object qualifies. For an extensive discussion about the syntax and rules used for queries, see the *Salesforce SOQL and SOSL Reference Guide*.

Upon invocation, the API executes the query against the specified object, caches the results of the query on the API, and returns a query response object to the client application. The client application can then use methods on the query response object to iterate through rows in the query response and retrieve information.

Your client application must be logged in with sufficient access rights to query individual objects within the specified object and to query the fields in the specified field list. For more information, see Factors that Affect Data Access.

Certain objects cannot be queried via the API. To query an object via the query() call, its object must be configured as queryable. To determine whether an object can be queried, your client application can invoke the describeSObjects() call on the object and inspect its queryable property.

Tip: If you use the enterprise WSDL, you should not use describe to populate a select list. For example, if a system administrator adds a field to the SObject after you consume it, the describe call will pull down the field but your toolkit won't know how to serialize it, and your integration may fail.

You can use queryAll() to query on all Task and Event records, archived or not. You can also filter on the isArchived field to find only the archived objects. You cannot use query(), it automatically filters out all records where isArchived is set to true. You can insert, update, or delete archived records.

The query result object contains up to 500 rows of data by default. If the query results exceed 500 rows, then the client application uses the queryMore() call and a server-side cursor to retrieve additional rows in 500-row chunks. You can increase the default size up to 2,000 in the QueryOptions header. For more details see Change the Batch Size in Queries in the *SOQL and SOSL Reference*.

Queries that take longer than two minutes to process will be timed out. For timed out queries, the API returns an API fault element of InvalidQueryLocatorFault. If a timeout occurs, refactor your query to return or scan a smaller amount of data.

When querying for fields of type Base64 (see base64), the query response object returns only one record at a time. You cannot alter this by changing the batch size of the query() call.

Note: For multicurrency organizations, special handling is required when querying currency fields containing values in different currencies. For example, if a client application is querying PricebookEntry objects based on values in the UnitPrice field, and if the UnitPrice amounts are expressed in different currencies, then the query logic must handle this case correctly. For example, if the query is trying to retrieve the product codes of all products with a unit price greater than or equal to $10 USD, the query expression might look something like this:

```
SELECT Product2Id,ProductCode,UnitPrice FROM PricebookEntry
WHERE (UnitPrice >= 10 and CurrencyIsoCode='USD')
OR (UnitPrice >= 5.47 and CurrencyIsoCode='GBP')
OR (UnitPrice >= 8.19 and CurrencyIsoCode='EUR')
```

Sample Code—Java

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords() {
   QueryResult qResult = null;
   try {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = connection.query(soqlQuery);
      boolean done = false;
      if (qResult.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
            + qResult.getSize() + " contact records.");
         while (!done) {
            SObject[] records = qResult.getRecords();
            for (int i = 0; i < records.length; ++i) {
               Contact con = (Contact) records[i];
               String fName = con.getFirstName();
               String lName = con.getLastName();
               if (fName == null) {
                  System.out.println("Contact " + (i + 1) + ": " + lName);
               } else {
                  System.out.println("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.isDone()) {
               done = true;
            } else {
               qResult = connection.queryMore(qResult.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
      System.out.println("\nQuery succesfully executed.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords()
{
   QueryResult qResult = null;
   try
   {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = binding.query(soqlQuery);
      Boolean done = false;
      if (qResult.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
            + qResult.size + " contact records.");
         while (!done)
         {
            sObject[] records = qResult.records;
            for (int i = 0; i < records.Length; ++i)
            {
               Contact con = (Contact)records[i];
               String fName = con.FirstName;
               String lName = con.LastName;
               if (fName == null)
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + lName);
               }
               else
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.done)
            {
               done = true;
            }
            else
            {
               qResult = binding.queryMore(qResult.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
      Console.WriteLine("\nQuery succesfully executed.");
   }
   catch (SoapException e)
   {
```

```
        Console.WriteLine("An unexpected error has occurred: " +
                                           e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
queryString	string	Query string that specifies the object to query, the fields to return, and any conditions for including a specific object in the query. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

QueryResult

Faults

MalformedQueryFault

InvalidSObjectFault

InvalidFieldFault

UnexpectedErrorFault

SEE ALSO:

- queryAll()
- queryMore()
- API Call Basics
- https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

QueryResult

The `query()` call returns a `QueryResult` object, which has the following properties:

Name	Type	Description
queryLocator	QueryLocator	A specialized string, similar to ID. Used in `queryMore()` for retrieving subsequent sets of objects from the query results, if applicable. Represents a server-side cursor. Each user can have up to ten query cursors open at a time.
done	boolean	Indicates whether additional rows need to be retrieved from the query results (`false`) using `queryMore()`, or not (`true`). Your client application can use this value as a loop condition while iterating through the query results.

Name	Type	Description
`records`	sObject[]	Array of sObjects representing individual objects of the specified object and containing data defined in the field list specified in the queryString. For information on queries that use a `GROUP BY` clause, see AggregateResult.
`size`	int	Your client application can use this value to determine whether the query retrieved any rows (size > 0) or not (size = 0). Total number of rows retrieved in the query.

AggregateResult

This object contains the results returned by a `query()` if the query contains an aggregate function, such as `MAX()`. AggregateResult is an sObject, but unlike other sObject objects such as Contact, it is read-only and it is only used for query results.

The QueryResult object has a `records` field that is an array of sObject records matching your query. For example, the following query returns an array of Contact records in the `records` field.

```
SELECT Id, LastName
FROM Contact
WHERE FirstName = 'Bob'
```

When a SOQL query contains an aggregate function, the results are a set of aggregated data instead of an array of records for a standard object, such as Contact. Therefore, the `records` field returns an array of AggregateResult records.

For more information on aggregate functions, see "Aggregate Functions" in the *Salesforce SOQL and SOSL Reference Guide*.

Fields

Each AggregateResult object contains a separate field for each of the items in the `SELECT` list. For the enterprise WSDL, retrieve the result for each item by calling `getField()` on an AggregateResult object when using WSC client framework. For the partner WSDL, retrieve the result for each item by calling `getField()` on an sObject object.

See Sample Code—Java and Sample Code—C# for examples that work with the enterprise WSDL.

Sample Code—Java

```
public void queryAggregateResult() {
  try {
    String groupByQuery = "SELECT Account.Name n, " +
        "MAX(Amount) max, MIN(Amount) min " +
        "FROM Opportunity GROUP BY Account.Name";
    QueryResult qr = connection.query(groupByQuery);
    if (qr.getSize() > 0) {
      System.out.println("Query returned " +
          qr.getRecords().length +  " results."
      );
      for (SObject sObj : qr.getRecords()) {
        AggregateResult result = (AggregateResult) sObj;
        System.out.println("aggResult.Account.Name: " +
            result.getField("n")
        );
        System.out.println("aggResult.max: " +
            result.getField("max")
```

```
        );
        System.out.println("aggResult.min: " +
            result.getField("min")
        );
        System.out.println();
      }
    } else {
      System.out.println("No results found.");
    }
    System.out.println("\nQuery successfully executed.");
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

```
private void testAggregateResult()
{
   try
   {
      QueryResult qr = null;

      binding.QueryOptionsValue = new QueryOptions();

      String soqlStr = "SELECT Name, " +
                       "MAX(Amount), " +
                       "MIN(Amount) " +
                       "FROM Opportunity " +
                       "GROUP BY Name";

      qr = binding.query(soqlStr);

      if (qr.size > 0)
      {

         for (int i = 0; i < qr.records.Length; i++)
         {

                sforce.AggregateResult ar = (AggregateResult)qr.records[i];

                foreach (XmlElement e in ar.Any)
                    Console.WriteLine(
                        "{0} - {1}",
                        e.LocalName,
                        e.InnerText
                    );

         }
      }
      else
      {
         Console.WriteLine("No records found");
```

```
        }
        Console.WriteLine("Query successfully executed.");
    }
    catch (Exception ex)
    {
        Console.WriteLine(
            "\nFailed to execute query successfully." +
            "error message was: \n" +
            ex.Message
        );

    }
}
```

QueryLocator

In the QueryResult object returned by the `query()` call, `queryLocator` contains a value that you will use in the subsequent `queryMore()` call. Note the following guidelines:

- Use a given `queryLocator` value only once. When you pass it in a `queryMore()` call, the API returns a new `queryLocator` in the QueryResult.
- `QueryLocator` objects expire automatically after 15 minutes of inactivity.
- A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

Note: Cursor limits for different Lightning Platform features are tracked separately. For example, you can have 10 query cursors open and 10 Metadata API cursors at the same time.

A `QueryLocator` represents a server-side cursor.

queryAll()

Retrieves data from specified objects, whether or not they have been deleted.

Syntax

```
QueryResult = connection.queryAll(string queryString);
```

Usage

Use `queryAll` to identify the records that have been deleted because of a merge or delete. `queryAll` has read-only access to the field `isDeleted`; otherwise it is the same as `query()`.

To find records that have been deleted (in preparation for undeleting them with the `undelete()` call), specify `isDeleted = true` in the query string, and for merged records, request the `masterRecord`. For example:

```
SELECT id, isDeleted, masterRecordId FROM Account WHERE masterRecordId='100000000000Abc'
```

You can use `queryAll()` to query on all Task and Event records, archived or not. You can also filter on the `isArchived` field to find only the archived objects. You cannot use `query()` as it automatically filters out all records where `isArchived` is set to `true`. You can update or delete archived records, though you cannot update the `isArchived` field. If you use the API to insert activities that meet the criteria listed below, the activities will be archived during the next run of the archival background process.

Because Salesforce doesn't track changes to external data, `queryAll()` behaves the same as `query()` for external objects.

For additional information about using queryAll, see `query()`.

Sample Code—Java

This sample performs a query to get all the accounts, whether they're deleted or not. It sets a custom batch size of 250 records. It fetches all batches of records by calling `queryAll()` the first time and then `queryMore()`. The names and the value of the isDeleted fields of all returned accounts are written to the console.

```
public void queryAllRecords() {
   // Setting custom batch size
   connection.setQueryOptions(250);

   try {
      String soqlQuery = "SELECT Name, IsDeleted FROM Account";
      QueryResult qr = connection.queryAll(soqlQuery);
      boolean done = false;
      if (qr.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
               + qr.getSize()
               + " contact records (including deleted records).");
         while (!done) {
            SObject[] records = qr.getRecords();
            for (int i = 0; i < records.length; i++) {
               Account account = (Account) records[i];
               boolean isDel = account.getIsDeleted();
               System.out.println("Account " + (i + 1) + ": "
                     + account.getName() + " isDeleted = "
                     + account.getIsDeleted());
            }
            if (qr.isDone()) {
               done = true;
            } else {
               qr = connection.queryMore(qr.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample performs a query to get all the accounts, whether they're deleted or not. It sets a custom batch size of 250 records. It fetches all batches of records by calling `queryAll()` the first time and then `queryMore()`. The names and the value of the isDeleted fields of all returned accounts are written to the console.

```
public void queryAllRecords()
{
   // Setting custom batch size
   QueryOptions qo = new QueryOptions();
   qo.batchSize = 250;
   qo.batchSizeSpecified = true;
   binding.QueryOptionsValue = qo;

   try
   {
      String soqlQuery = "SELECT Name, IsDeleted FROM Account";
      QueryResult qr = binding.queryAll(soqlQuery);
      Boolean done = false;
      if (qr.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
               + qr.size
               + " contact records (including deleted records).");
         while (!done)
         {
            sObject[] records = qr.records;
            for (int i = 0; i < records.Length; i++)
            {
               Account account = (Account)records[i];
               Boolean isDel = (Boolean)account.IsDeleted;
               Console.WriteLine("Account " + (i + 1) + ": "
                     + account.Name + " isDeleted = "
                     + account.IsDeleted);
            }
            if (qr.done)
            {
               done = true;
            }
            else
            {
               qr = binding.queryMore(qr.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
```

```
    }
}
```

Arguments

Name	Type	Description
`queryString`	string	Query string that specifies the object to query, the fields to return, and any conditions for including a specific object in the query. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

QueryResult

Faults

`MalformedQueryFault`

`InvalidSObjectFault`

`InvalidFieldFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

queryMore()

`queryMore()`

Retrieves the next batch of objects from a `query()`.

Syntax

```
QueryResult = connection.queryMore( QueryLocator  QueryLocator);
```

Usage

Use this call to process `query()` calls that retrieve a large number of records (by default, more than 500) in the result set. The `query()` call retrieves the first 500 records and creates a server-side cursor that is represented in the queryLocator object. The `queryMore()` call processes subsequent records in up to 500-record chunks, resets the server-side cursor, and returns a newly generated QueryLocator. To iterate through records in the result set, you generally call `queryMore()` repeatedly until all records in the result set have been processed (the `Done` flag is `true`). You can change the maximum number of records returned to up to 2,000. See Change the Batch Size in Queries in the *Salesforce SOQL and SOSL Reference Guide* for more information.

You can't use `queryMore()` if a query includes a `GROUP BY` clause. See `GROUP BY` and `queryMore()` in the *Salesforce SOQL and SOSL Reference Guide* for more information.

Note: A `queryMore()` call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use `queryMore()` on those results before using `queryMore()` on the parent results.

When querying external objects, Salesforce Connect accesses the external data in real time via Web service callouts. Each `queryMore()` call results in a Web service callout. The batch boundaries and page sizes depend on your adapter and how you set up the external data source.

We recommend the following:

- When possible, avoid paging by filtering your queries of external objects to return fewer rows than the batch size, which by default is 500 rows. Remember, obtaining each batch requires a `queryMore()` call, which results in a Web service callout.
- If the external data frequently changes, avoid using `queryMore()` calls. If the external data is modified between `queryMore()` calls, you can get an unexpected `QueryResult`.

If the primary or "driving" object for a `SELECT` statement is an external object, `queryMore()` supports only that primary object and doesn't support subqueries.

By default, the OData 2.0 and 4.0 adapters for Salesforce Connect use client-driven paging. With client-driven paging, OData adapters convert each `queryMore()` call into an OData query that uses the `$skip` and `$top` system query options to specify the batch boundary and page size. These options are similar to using `LIMIT` and `OFFSET` clauses to page through a result set. If you enable server-driven paging on an external data source, Salesforce ignores the requested page sizes, including the default `queryMore()` batch size of 500 rows. The pages returned by the external system determine the batches, but each page can't exceed 2,000 rows.

Sample Code—Java

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords() {
   QueryResult qResult = null;
   try {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = connection.query(soqlQuery);
      boolean done = false;
      if (qResult.getSize() > 0) {
         System.out.println("Logged-in user can see a total of "
            + qResult.getSize() + " contact records.");
         while (!done) {
            SObject[] records = qResult.getRecords();
            for (int i = 0; i < records.length; ++i) {
               Contact con = (Contact) records[i];
               String fName = con.getFirstName();
               String lName = con.getLastName();
               if (fName == null) {
                  System.out.println("Contact " + (i + 1) + ": " + lName);
               } else {
                  System.out.println("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.isDone()) {
```

```
               done = true;
            } else {
               qResult = connection.queryMore(qResult.getQueryLocator());
            }
         }
      } else {
         System.out.println("No records found.");
      }
      System.out.println("\nQuery succesfully executed.");
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample executes a query that fetches the first names and last names of all contacts. It calls `query()` with the query string to get the first batch of records. It then calls `queryMore()` in a loop to get subsequent batches of records until no records are returned. It writes the first and last names of the contacts queried to the console.

```
public void queryRecords()
{
   QueryResult qResult = null;
   try
   {
      String soqlQuery = "SELECT FirstName, LastName FROM Contact";
      qResult = binding.query(soqlQuery);
      Boolean done = false;
      if (qResult.size > 0)
      {
         Console.WriteLine("Logged-in user can see a total of "
            + qResult.size + " contact records.");
         while (!done)
         {
            sObject[] records = qResult.records;
            for (int i = 0; i < records.Length; ++i)
            {
               Contact con = (Contact)records[i];
               String fName = con.FirstName;
               String lName = con.LastName;
               if (fName == null)
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + lName);
               }
               else
               {
                  Console.WriteLine("Contact " + (i + 1) + ": " + fName
                        + " " + lName);
               }
            }
            if (qResult.done)
            {
               done = true;
```

```
            }
            else
            {
               qResult = binding.queryMore(qResult.queryLocator);
            }
         }
      }
      else
      {
         Console.WriteLine("No records found.");
      }
      Console.WriteLine("\nQuery succesfully executed.");
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                 e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`queryLocator`	QueryLocator	Represents the server-side cursor that tracks the current processing location in the query result set.

Response

QueryResult

Faults

`InvalidQueryLocatorFault`

`UnexpectedErrorFault`

SEE ALSO:

- query()
- API Call Basics
- https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

QueryResult

The `queryMore()` call returns a `QueryResult` object, which has the following properties:

Name	Type	Description
queryLocator	QueryLocator	A specialized string, similar to ID. Used in the subsequent queryMore() call for retrieving sets of objects from the query results, if applicable.
done	boolean	Indicates whether additional rows need to be retrieved from the query results (false) using another queryMore() call, or not (true). Your client application can use this value as a loop condition while iterating through the query results.
records	sObject[]	Array of sObjects representing individual objects of the specified object and containing data defined in the field list specified in the queryString.
size	int	Total number of rows retrieved in the query. Your client application can use this value to determine whether the query retrieved any rows (size != 0) or not (size = 0). When querying external objects, the system may not know the number of rows that are retrieved from the external data source. If this situation occurs, size = -1.

Note: A queryMore() call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use queryMore() on those results before using queryMore() on the parent results.

QueryLocator

In the QueryResult object returned by the queryMore() call, queryLocator contains a value that you will use in the subsequent queryMore() call. Note the following guidelines for using this value:

- Use a queryLocator only once. When you pass it in a queryMore() call, the API returns a new queryLocator in the QueryResult.
- The queryLocator value expires automatically after 15 minutes of inactivity.
- A user can have up to ten query cursors open at a time. If ten QueryLocator cursors are opened when a client application with the same logged-in user attempts to open a new cursor, then the oldest of the ten cursors is released.
- You can't use a custom metadata query as a queryLocator.

A QueryLocator represents a server-side cursor.

Note: A queryMore() call on a parent object invalidates all child cursors in the previous result set. If you need the results from the child, you must use queryMore() on those results before using queryMore() on the parent results.

retrieve()

Retrieves one or more records based on the specified IDs.

Syntax

```
sObject[] result = connection.retrieve(string fieldList, string sObjectType, ID ids[]);
```

Usage

Use the `retrieve()` call to retrieve individual records from an object. The client application passes the list of fields to retrieve, the object, and an array of record IDs to retrieve. The `retrieve()` call does not return records that have been deleted.

In general, you use `retrieve()` when you know in advance the IDs of the records to retrieve. Use `query()` instead to obtain records when you do not know the IDs or when you want to specify other selection criteria.

Client applications can use `retrieve()` to perform a client-side join. For example, a client application can run a `query()` to obtain a set of Opportunity records, iterate through the returned opportunity records, obtain the `accountId` for each opportunity, and then call `retrieve()` to obtain Account information for those `accountIds`.

Records for certain objects cannot be retrieved via the API. To retrieve a record via the `retrieve()` call, its object must be configured as retrieveable (`retrieveable` is `true`). To determine whether an object can be retrieved, your client application can invoke the `describeSObjects()` call on the object and inspect its `retrievable` property.

Your client application must be logged in with sufficient access rights to retrieve records within the specified object and to retrieve the fields in the specified field list. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample retrieves the Id, Name, and Website of the specified Account records. It writes the fields of the retrieved records to the console.

```java
public void retrieveRecords(String[] ids) {
   try {
      SObject[] sObjects = connection.retrieve("ID, Name, Website",
            "Account", ids);
      // Verify that some objects were returned.
      // Even though we began with valid object IDs,
      // someone else might have deleted them in the meantime.
      if (sObjects != null) {
         for (int i = 0; i < sObjects.length; i++) {
            // Cast the SObject into an Account object
            Account retrievedAccount = (Account) sObjects[i];
            if (retrievedAccount != null) {
               System.out.println("Account ID: " + retrievedAccount.getId());
               System.out.println("Account Name: " + retrievedAccount.getName());
               System.out.println("Account Website: "
                     + retrievedAccount.getWebsite());
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample retrieves the Id, Name, and Website of the specified Account records. It writes the fields of the retrieved records to the console.

```
public void retrieveRecords(String[] ids)
{
   try
   {
      sObject[] sObjects = binding.retrieve("ID, Name, Website",
            "Account", ids);
      // Verify that some objects were returned.
      // Even though we began with valid object IDs,
      // someone else might have deleted them in the meantime.
      if (sObjects != null)
      {
         for (int i = 0; i < sObjects.Length; i++)
         {
            // Cast the SObject into an Account object
            Account retrievedAccount = (Account)sObjects[i];
            if (retrievedAccount != null)
            {
               Console.WriteLine("Account ID: " + retrievedAccount.Id);
               Console.WriteLine("Account Name: " + retrievedAccount.Name);
               Console.WriteLine("Account Website: "
                     + retrievedAccount.Website);
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`fieldList`	string	List of one or more fields in the specified object, separated by commas. You must specify valid field names and must have read-level permissions to each specified field. The fieldList defines the ordering of fields in the `result`.
`sObjectType`	string	Object from which to retrieve data. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.
`ids`	ID[]	Array of one or more IDs of the objects to retrieve. You can pass a maximum of 2000 object IDs to the `retrieve()` call. For information on IDs, see ID Field Type.

Response

Name	Type	Description
`result`	sObject[]	Array of one or more sObjects representing individual records of the specified object. The number of sObjects returned in the array matches the number of IDs passed into the `retrieve()` call. If you do not have access to an object or if a passed ID is invalid, the array returns `null` for that object. For information on IDs, see ID Field Type.

Faults

`InvalidSObjectFault`

`InvalidFieldFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

search()

Executes a text search in your organization's data.

Syntax

```
SearchResult = connection.search(String searchString);
```

Usage

Use `search()` to search for records based on a search string. The `search()` call supports searching custom objects. For an extensive discussion about the syntax and rules used for text searches, see the *Salesforce SOQL and SOSL Reference Guide*.

Certain objects cannot be searched via the API, such as Attachment objects. To search an object via the `search()` call, the object must be configured as searchable (`isSearchable` is `true`). To determine whether an object can be searched, your client application can invoke the `describeSObjects()` call on the object and inspect its `searchable` property.

Sample Code—Java

This sample makes the `search()` call by passing it a SOSL query, which returns contacts, leads, and accounts whose phone fields contain a specified value. Next, it gets the sObject records from the results and stores the records in arrays depending on the record type. Finally, it writes the fields of the returned contacts, leads, and accounts to the console.

```
public void searchSample() {
            try {
            // Perform the search using the SOSL query.
```

```
SearchResult sr = connection.search(
"FIND {4159017000} IN Phone FIELDS RETURNING "
+ "Contact(Id, Phone, FirstName, LastName), "
+ "Lead(Id, Phone, FirstName, LastName), "
+ "Account(Id, Phone, Name)");

// Get the records from the search results.
SearchRecord[] records = sr.getSearchRecords();

ArrayList<Contact> contacts = new ArrayList<Contact>();
ArrayList<Lead> leads = new ArrayList<Lead>();
ArrayList<Account> accounts = new ArrayList<Account>();

// For each record returned, find out if it's a
// contact, lead, or account and add it to the
// appropriate array, then write the records
// to the console.
if (records.length > 0) {
for (int i = 0; i < records.length; i++) {
SObject record = records[i].getRecord();
if (record instanceof Contact) {
contacts.add((Contact) record);
} else if (record instanceof Lead) {
leads.add((Lead) record);
} else if (record instanceof Account) {
accounts.add((Account) record);
}
}

System.out.println("Found " + contacts.size() + " contacts.");
for (Contact c : contacts) {
System.out.println(c.getId() + ", " + c.getFirstName() + ", "
+ c.getLastName() + ", " + c.getPhone());
}
System.out.println("Found " + leads.size() + " leads.");
for (Lead d : leads) {
System.out.println(d.getId() + ", " + d.getFirstName() + ", "
+ d.getLastName() + ", " + d.getPhone());
}
System.out.println("Found " + accounts.size() + " accounts.");
for (Account a : accounts) {
System.out.println(a.getId() + ", " + a.getName() + ", "
+ a.getPhone());
}
} else {
System.out.println("No records were found for the search.");
}
} catch (Exception ce) {
ce.printStackTrace();
}
}
```

Sample Code—C#

This sample makes the `search()` call by passing it a SOSL query, which returns contacts, leads, and accounts whose phone fields contain a specified value. Next, it gets the sObject records from the results and stores the records in arrays depending on the record type. Finally, it writes the fields of the returned contacts, leads, and accounts to the console.

```
public void searchSample()
            {
            try
            {
            // Perform the search using the SOSL query.
            SearchResult sr = binding.search(
            "FIND {4159017000} IN Phone FIELDS RETURNING "
            + "Contact(Id, Phone, FirstName, LastName), "
            + "Lead(Id, Phone, FirstName, LastName), "
            + "Account(Id, Phone, Name)");

            // Get the records from the search results.
            SearchRecord[] records = sr.searchRecords;

            List<Contact> contacts = new List<Contact>();
            List<Lead> leads = new List<Lead>();
            List<Account> accounts = new List<Account>();

            // For each record returned, find out if it's a
            // contact, lead, or account and add it to the
            // appropriate array, then write the records
            // to the console.
            if (records.Length > 0)
            {
            for (int i = 0; i < records.Length; i++)
            {
            sObject record = records[i].record;
            if (record is Contact)
            {
            contacts.Add((Contact)record);
            }
            else if (record is Lead)
            {
            leads.Add((Lead)record);
            }
            else if (record is Account)
            {
            accounts.Add((Account)record);
            }
            }

            Console.WriteLine("Found " + contacts.Count + " contacts.");
            foreach (Contact c in contacts)
            {
            Console.WriteLine(c.Id + ", " +
            c.FirstName + ", " +
            c.LastName + ", " +
            c.Phone);
```

```
}
Console.WriteLine("Found " + leads.Count + " leads.");
foreach (Lead d in leads)
{
Console.WriteLine(d.Id + ", " +
d.FirstName + ", " +
d.LastName + ", " +
d.Phone);
}
Console.WriteLine("Found " + accounts.Count + " accounts.");
foreach (Account a in accounts)
{
Console.WriteLine(a.Id + ", " +
a.Name + ", " +
a.Phone);
}
}
else
{
Console.WriteLine("No records were found for the search.");
}
}
catch (SoapException e)
{
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
search	string	Search string that specifies the text expression to search for, the scope of fields to search, the list of objects and fields to retrieve, and the maximum number of records to return. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.

Response

SearchResult

Fault

InvalidFieldFault

InvalidSObjectFault

MalformedSearchFault

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

SearchResult

The `search()` call returns a SearchResult object, which has the following properties.

Name	Type	Description
`queryId`	string	Unique identifier for the `SOSL` search.
`searchRecords`	SearchRecord[]	Array of SearchRecord objects, each of which contains an sObject.
`searchResultsMetadata`	SearchResultsMetadata	Metadata for SearchRecords.

SearchRecord

Represents an individual record returned from a search.

Name	Type	Description
`record`	sObject	The individual record returned by the search.
`searchRecordMetadata`	SearchRecordMetadata	Metadata for `searchRecords`.
`snippet`	SearchSnippet	On the search results page, shows terms that match the search string, highlighted within the surrounding text.

SearchRecordMetadata

Metadata for search results at the record level.

Name	Type	Description
`searchPromoted`	boolean	Indicates that an article has been promoted in search results. Admins define promoted search terms by adding promoted terms to knowledge articles. Users who search for these keywords see the article first in search results. Available in API version 42.0 and later.
`spellCorrected`	boolean	Indicates that a record matches a spell-corrected search term. Appears in the response only when true.

SearchSnippet

Excerpts shown on search results pages for article, case, feed, and idea searches.

Name	Type	Description
text	string	The excerpt that contains the match for the search term.
wholeFields	WholeFields	The list of highlighted fields.

WholeFields

Contains the complete text of each field that contains highlighting for terms that match the search query. The highlighted terms are surrounded by `<mark>` tags.

Name	Type	Description
name	string	The name of the highlighted field.
value	string	The highlighted text.

SearchResultsMetadata

Global metadata for the search result.

Name	Type	Description
entityMetadata	EntitySearchMetadata	Search results metadata at the object level.

EntitySearchMetadata

Metadata for search results at the object level.

Name	Type	Description
fieldMetadata	FieldLevelSearchMetadata	Metadata for search results at the field level.
searchPromotedMetadata	EntitySearchPromotionMetadata	Metadata for search term promotion at the object level. Available in API version 42.0 and later.
spellCorrectionMetadata	EntitySpellCorrectionMetadata	Metadata for spelling correction at the object level.
entityName	string	Identifies the object.

FieldLevelSearchMetadata

Metadata for search results at the field level.

Name	Type	Description
name	string	The field name.
label	string	The field label.
type	string	The field type.

EntitySearchPromotionMetadata

Metadata for search term promotion at the object level. Appears in the response only when at least one article for an object is a promoted result. Available in API version 42.0 and later.

Name	Type	Description
`promotedResultCount`	int	Count of promoted article results at the object level.

EntitySpellCorrectionMetadata

Metadata for spelling correction at the object level. Appears in the response only when at least one record for an object matches a spell-corrected search term.

Name	Type	Description
`correctedQuery`	string	The spell-corrected search term.
`hasNonCorrectedResults`	boolean	If `true`, indicates that the user has access to at least one record that matches a search term that wasn't spell-corrected. Each object sometimes returns a different value.

`undelete()`

Undeletes records from the Recycle Bin.

Syntax

```
UndeleteResult[] = connection.undelete(ID[] ids );
```

Usage

Use this call to restore any deleted record that is undeletable. Undeletable records include those in the Recycle Bin. Records can be put in the Recycle Bin as the result of a `merge()` or `delete()` call. You can identify deleted records, including records deleted as the result of a merge, using the `queryAll()` call.

You should verify that a record can be undeleted before attempting to delete it. Some records cannot be undeleted, for example, Account records can be undeleted, but not AccountTeamMember records. To verify that a record can be undeleted, check that the value of the `undeletable` flag in the DescribeSObjectResult for that object is set to `true`.

Since a delete call cascade-deletes child records, an undelete call will undelete the cascade-deleted records. For example, deleting an account will delete all the contacts associated with that account.

You can undelete records that were deleted as the result of a merge, but the child objects will have been re-parented, which cannot be undone.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

This call supports the AllOrNoneHeader, AllowFieldTruncationHeader, and CallOptions headers.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Sample Code—Java

This sample calls `queryAll()` to get the last five deleted accounts. It then passes the IDs of these accounts to `undelete()`, which restores these accounts. Finally, it checks the results of the call and writes the IDs of the restored accounts or any errors to the console.

```
public void undeleteRecords() {
   try {
      // Get the accounts that were last deleted
      // (up to 5 accounts)
      QueryResult qResult = connection
            .queryAll("SELECT Id, SystemModstamp FROM "
                  + "Account WHERE IsDeleted=true "
                  + "ORDER BY SystemModstamp DESC LIMIT 5");

      String[] Ids = new String[qResult.getSize()];
      // Get the IDs of the deleted records
      for (int i = 0; i < qResult.getSize(); i++) {
         Ids[i] = qResult.getRecords()[i].getId();
      }

      // Restore the records
      UndeleteResult[] undelResults = connection.undelete(Ids);

      // Check the results
      for (UndeleteResult result : undelResults) {
         if (result.isSuccess()) {
            System.out.println("Undeleted Account ID: " + result.getId());
         } else {
            if (result.getErrors().length > 0) {
               System.out.println("Error message: "
                     + result.getErrors()[0].getMessage());
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `queryAll()` to get the last five deleted accounts. It then passes the IDs of these accounts to `undelete()`, which restores these accounts. Finally, it checks the results of the call and writes the IDs of the restored accounts or any errors to the console.

```
public void undeleteRecords()
{
   try
   {
      // Get the accounts that were last deleted
      //   (up to 5 accounts)
      QueryResult qResult = binding.queryAll(
            "SELECT Id, SystemModstamp FROM " +
            "Account WHERE IsDeleted=true " +
            "ORDER BY SystemModstamp DESC LIMIT 5");

      String[] Ids = new String[qResult.size];
      // Get the IDs of the deleted records
      for (int i = 0; i < qResult.size; i++)
      {
         Ids[i] = qResult.records[i].Id;
      }

      // Restore the records
      UndeleteResult[] undelResults = binding.undelete(Ids);

      // Check the results
      foreach (UndeleteResult result in undelResults)
      {
         if (result.success)
         {
            Console.WriteLine("Undeleted Account ID: " +
                  result.id);
         }
         else
         {
            if (result.errors.Length > 0)
            {
               Console.WriteLine("Error message: " +
                     result.errors[0].message);
            }
         }
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                           e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`ids`	ID[]	IDs of the records to be restored.

Response

UndeleteResult

Faults

`UnexpectedErrorFault`

SEE ALSO:

delete()

UndeleteResult

The `undelete()` call returns an undeleteResult object with the following properties:

Name	Type	Description
`Id`	ID	ID of the record being undeleted.
`success`	boolean	Indicates whether the undelete was successful (`true`) or not (`false`).
`errors`	Error[]	If an error occurred during the `undelete()` call, an array of one or more Error objects providing the error code and description.

`update()`

Updates one or more existing records in your organization's data.

Syntax

```
SaveResult[] = connection.update(sObject[] sObjects);
```

Usage

Use this call to update one or more existing records, such as accounts or contacts, in your organization's data. The `update()` call is analogous to the UPDATE statement in SQL.

Permissions

Your client application must be logged in with sufficient access rights to `update()` records objects for the specified object, as well as individual fields inside that object. For more information, see Factors that Affect Data Access.

Special Handling

Certain objects—and certain fields within those objects—require special handling or permissions. For example, you might also need permissions to access an object's parent object. Before you attempt to update a record for a particular object, be sure to read its description in the Standard Objects and in the Salesforce online help.

Updateable Objects

Certain records cannot be updated via the API. To update a record via the `update()` call, its object must be configured as updateable (`updateable` is `true`). To determine whether an object can be updated, your client application can invoke the `describeSObjects()` call on the object and inspect its `updateable` property.

Required Fields

When updating required fields, you must supply a value—you cannot set the value to `null`. For more information, see Required Fields.

ID Fields

Fields whose names contain "`Id`" are either that object's primary key (see ID Field Type) or a foreign key (see Reference Field Type). Client applications cannot update primary keys, but they can update foreign keys. For example, a client application can update the `OwnerId` of an Account, because `OwnerID` is a foreign key that refers to the user who owns the account record. Use `describeSObjects()` to confirm whether the field can be updated.

This call checks a batch for duplicate `Id` values, and if there are duplicates, the first 12 are processed. For additional duplicate `Id` values, the SaveResult for those entries is marked with an error similar to the following:

```
Maximum number of duplicate updates in one batch (12 allowed).
```

Automatically Updated Fields

The API updates certain fields automatically, such as `LastModifiedDate`, `LastModifiedById`, and `SystemModstamp`. You cannot explicitly specify these values in your `update()` call.

Resetting Values to null

To reset a field value to `null`, you add the field name to the `fieldsToNull` array in the sObject. You cannot set required fields (`nillable` is `false`) to `null`.

Valid Field Values

You must supply values that are valid for the field's data type, such as integers (not alphabetic characters) for integer fields. In your client application, follow the data formatting rules specified for your programming language and development tool (your development tool will handle the appropriate mapping of data types in SOAP messages).

String Values

When storing values in string fields, the API trims any leading and trailing white space. For example, if the value of a name field is entered as `" ABC Company "`, then the value is stored in the database as `"ABC Company"`.

Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Assignment Rules

When updating Case or Lead objects, your client application can set AssignmentRuleHeader options to have the case or lead automatically assigned to one or more users based on assignment rules configured in the Salesforce user interface. For more information, see Case or Lead.

Maximum Number of Objects Updated

Your client application can change up to 200 records in a single `update()` call. If an update request exceeds 200 records, the entire operation fails.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

When you update the owner of a record, the new owner is not automatically subscribed to the record, unless the new owner has automatic subscriptions for records enabled in his or her Chatter feed settings. The previous owner is not automatically unsubscribed. If the new owner has automatic subscriptions for records enabled, the new and previous owners both see any changes to the record in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

Updating Records for Different Object Types

You can update records for multiple object types, including custom objects, in one call with API version 20.0 and later. For example, you could update a contact and an account in one call. You can update records for up to 10 objects types in one call.

Records are saved in the same order that they are entered in the `sObjects` input array.

Records for different object types are broken into multiple chunks by Salesforce. A chunk is a subset of the `sObjects` input array and each chunk contains records of one object type. Data is committed on a chunk-by-chunk basis. Any Apex triggers related to the records in a chunk are invoked once per chunk. Consider an `sObjects` input array containing the following set of records:

```
account1, account2, contact1, contact2, contact3, case1, account3, account4, contact4
```

Salesforce splits the records into five chunks:

1. `account1, account2`
2. `contact1, contact2, contact3`
3. `case1`
4. `account3, account4`
5. `contact4`

Each call can process up to 10 chunks. If the `sObjects` array contains more than 10 chunks, you must process the records in more than one call.

Warning: You can't update records for multiple object types in one call if one of those types is related to a feature in the Setup area in Salesforce. The only exceptions are the following objects:

- Custom settings objects, which are similar to custom objects. For more information, see "Create Custom Data Sets" in the Salesforce online help.
- GroupMember
- Group
- User if the following fields are not being updated:
  - `UserRoleId`
  - `IsActive`
  - `ForecastEnabled`
  - `IsPortalEnabled`
  - `Username`
  - `ProfileId`

`update()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to update a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key to an instance of the parent sObject that has only the external ID field specified. This external ID should match the external ID value on the parent record.

The following Java and C# examples show you how to update an opportunity and relate it to an existing account using a custom external ID field named `MyExtId__c`. Each example has a method that accepts the ID of the opportunity to update. It creates an opportunity sObject and sets its ID field so that the object points to an existing opportunity to be updated, sets a new value for the stage name field, and then sets the external ID field to the account object. It then updates the opportunity. Once the opportunity is updated, the account becomes its parent and the state name is updated.

Java Example

```
public void updateForeignKeySample(String oppId) {
   try {
      Opportunity updateOpportunity = new Opportunity();
      // Point to an existing opportunity to update
```

```
        updateOpportunity.setId(oppId);
        updateOpportunity.setStageName("Qualification");

        Account parentAccountRef = new Account();
        parentAccountRef.setMyExtId__c("SAP1111111");
        updateOpportunity.setAccount(parentAccountRef);

        SaveResult[] results = connection
              .update(new SObject[] { updateOpportunity });
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

C# Example

```
public void updateForeignKeySample(String oppId)
{
    try
    {
        Opportunity updateOpportunity = new Opportunity();
        // Point to an existing opportunity to update
        updateOpportunity.Id = oppId;
        updateOpportunity.StageName = "Prospecting";

        Account parentAccountRef = new Account();
        parentAccountRef.MyExtId__c = "SAP1111111";
        updateOpportunity.Account = parentAccountRef;

        SaveResult[] results = binding.update(
            new sObject[] { updateOpportunity });
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
                                  e.Message + "\n" + e.StackTrace);
    }
}
```

Basic Steps for Updating Records

Use this process to update records:

1. Determine the ID of each record that you want to `update()`. For example, you might call `query()` to retrieve a set of records (with their IDs), based on specific criteria, that you would want to update. If you know the ID of the record that you want to update, you can call `retrieve()` instead. For information on IDs, see ID Field Type.
2. Create an sObject for each record, and populate its fields with the data that you want to update.
3. Construct an sObject[] array and populate that array with the records that you want to update.
4. Call `update()`, passing in the sObject[] array.
5. Process the results in the SaveResult[] object to verify whether the records have been successfully updated.

Sample Code—Java

This sample accepts the IDs of the accounts to update. It creates two account sObjects, sets each with one of the passed IDs so that the sObject points to an existing account, and sets other fields. It then makes the `update()` call and verifies the results.

```
public void updateRecords(String[] ids) {
   Account[] updates = new Account[2];

   Account account1 = new Account();
   account1.setId(ids[0]);
   account1.setShippingPostalCode("89044");
   updates[0] = account1;

   Account account2 = new Account();
   account2.setId(ids[1]);
   account2.setNumberOfEmployees(1000);
   updates[1] = account2;

   // Invoke the update call and save the results
   try {
      SaveResult[] saveResults = connection.update(updates);
      for (SaveResult saveResult : saveResults) {
         if (saveResult.isSuccess()) {
            System.out.println("Successfully updated Account ID: "
                  + saveResult.getId());
         } else {
            // Handle the errors.
            // We just print the first error out for sample purposes.
            Error[] errors = saveResult.getErrors();
            if (errors.length > 0) {
               System.out.println("Error: could not update " + "Account ID "
                     + saveResult.getId() + ".");
               System.out.println("\tThe error reported was: ("
                     + errors[0].getStatusCode() + ") "
                     + errors[0].getMessage() + ".");
            }
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts the IDs of the accounts to update. It creates two account sObjects, sets each with one of the passed IDs so that the sObject points to an existing account, and sets other fields. It then makes the `update()` call and verifies the results.

```
public void updateRecords(String[] ids)
{
   Account[] updates = new Account[2];

   Account account1 = new Account();
   account1.Id = ids[0];
```

```
    account1.ShippingPostalCode = "89044";
    updates[0] = account1;

    Account account2 = new Account();
    account2.Id = ids[1];
    account2.NumberOfEmployees = 1000;
    updates[1] = account2;

    // Invoke the update call and save the results
    try
    {
       SaveResult[] saveResults = binding.update(updates);
       foreach (SaveResult saveResult in saveResults)
       {
          if (saveResult.success)
          {
             Console.WriteLine("Successfully updated Account ID: " +
                   saveResult.id);
          }
          else
          {
             // Handle the errors.
             // We just print the first error out for sample purposes.
             Error[] errors = saveResult.errors;
             if (errors.Length > 0)
             {
                Console.WriteLine("Error: could not update " +
                      "Account ID " + saveResult.id + "."
                );
                Console.WriteLine("\tThe error reported was: (" +
                      errors[0].statusCode + ") " +
                      errors[0].message + "."
                );
             }
          }
       }
    }
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                                    e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sObjects	sObject[]	Array of one or more records (maximum of 200) to update.

Response

SaveResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

https://wiki.developerforce.com/index.php/Sample_SOAP_Messages

SaveResult

The `update()` call returns an array of SaveResult objects. Each element in the SaveResult array corresponds to the sObject[] array passed as the `sObjects` parameter in the `update()` call. For example, the object returned in the first index in the SaveResult array matches the object specified in the first index of the sObject[] array.

A SaveResult object has the following properties:

Name	Type	Description
`id`	ID	ID of an sObject that you successfully updated. If this field contains a value, then the object was updated successfully. If this field is empty, then the object was not updated and the API returned error information instead.
`success`	boolean	Indicates whether the `update()` call succeeded (`true`) or not (`false`) for this object.
`errors`	Error[]	If an error occurred during the `update()` call, an array of one or more Error objects providing the error code and description. If your organization has active duplicate rules and a duplicate is detected, the SaveResult includes an Error with a data type of DuplicateError.

`upsert()`

Creates new records and updates existing records; uses a custom field to determine the presence of existing records. In most cases, we recommend that you use `upsert()` instead of `create()` to avoid creating unwanted duplicate records (idempotent). Available in the API version 7.0 and later.

Note: Starting with API version 15.0, if you specify a value for a field that contains a string, and the value is too big for the field, the call fails and an error is returned. In previous versions of the API the value was truncated and the call succeeded. If you wish to keep the old behavior with versions 15.0 and later, use the AllowFieldTruncationHeader SOAP header.

Syntax

```
UpsertResult[] = connection.upsert(String externalIdFieldName, sObject[] sObjects);
```

Usage

Upsert is a merging of the words insert and update. This call is available for objects if the object has an external ID field or a field with the idLookup field property.

On custom objects, this call uses an indexed custom field called an external ID to determine whether to create a new record or update an existing record. On standard objects, this call can use the name of any field with the idLookup field property instead of the external ID.

Note: External ID fields cannot be used with `merge()`.

For more information about adding custom fields, including external ID fields, to objects, see the "Adding Fields" topic in the Salesforce online help.

Using this call can dramatically reduce how many calls you need to make, particularly when:

- You are integrating your organization's Salesforce data with ERP (enterprise resource planning) systems such as accounting and manufacturing.
- You are importing data and want to prevent the creation of duplicate objects.

If you are upserting a record for an object that has a custom field with both the `External ID` and `Unique` attributes selected (a unique index), you do not need any special permissions, because the `Unique` attribute prevents the creation of duplicates. If you are upserting a record for an object that has the `External ID` attribute selected but not the `Unique` attribute selected, (a non-unique index) your client application must have the permission "View All Data" to execute this call. Having this permission prevents the client application from using `upsert()` to insert an accidental duplicate record because it couldn't see that the record existed.

Note: Matching by external ID is case-insensitive only if the external ID field has the `Unique` attribute and the `Treat "ABC" and "abc" as duplicate values (case insensitive)` option selected. These options are selected in the Salesforce user interface during field creation. If this is the case, "ABC123" is matched with "abc123." Before performing an operation, if you have external ID fields without the case-insensitive option selected, review your external IDs for any values that would be matched if case was not considered. If such values exist, you may want to modify them to make them unique, or select the case-sensitive option for your external ID fields. For more information about field attributes, see "Custom Field Attributes" in the Salesforce online help.

How Upsert Chooses to `update()` or `create()`

Upsert uses the external ID to determine whether it should create a new record or update an existing one:

- If the external ID is not matched, then a new record is created.
- If the external ID is matched once, then the existing record is updated.
- If the external ID is matched multiple times, then an error is reported.
- When batch updating multiple records where the external ID is the same for two or more records in your batch call, those records will be marked as errors in the UpsertResult file. The records will be neither created or updated.

Rollback on Error

The AllOrNoneHeader header allows you to roll back all changes unless all records are processed successfully. This header is available in API version 20.0 and later. Allows a call to roll back all changes unless all records are processed successfully.

Automatic Subscriptions for Chatter Feeds

To subscribe to records they create, users must enable the `Automatically follow records that I create` option in their personal settings. If users have automatic subscriptions enabled, they automatically follow the records they create and see changes to those records in their Chatter feed on the Home tab.

When you update the owner of a record, the new owner is not automatically subscribed to the record, unless the new owner has automatic subscriptions for records enabled in his or her Chatter feed settings. The previous owner is not automatically unsubscribed. If the new owner has automatic subscriptions for records enabled, the new and previous owners both see any changes to the record in their news feed.

A user can subscribe to a record or to another user. Changes to the record and updates from the users are displayed in the Chatter feed on the user's home page, which is a useful way to stay up-to-date with other users and with changes made to records in Salesforce. Feeds are available in API version 18.0 and later.

`upsert()` and Foreign Keys

You can use external ID fields as a foreign key, which allows you to create or update a record and relate it to another existing record in a single step instead of querying the parent record ID first. To do this, set the foreign key to an instance of the parent sObject that has only the external ID field specified. This external ID should match the external ID value on the parent record. Unlike `create()`, the parent record must already exist when using `upsert()` to create or update a child record related by a foreign key.

The following Java and C# examples upsert an opportunity. In this case, the opportunity doesn't exist in the database, so the `upsert()` call will create it. The opportunity references an existing account. Rather than specify the account ID, which would require a separate query to obtain, we specify an external ID for the account, in this example the `MyExtId__c` custom field.

Java Example

```
public void upsertForeignKeySample() {
   try {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.setName("UpsertOpportunity");
      newOpportunity.setStageName("Prospecting");
      Calendar dt = connection.getServerTimestamp().getTimestamp();
      dt.add(Calendar.DAY_OF_MONTH, 7);
      newOpportunity.setCloseDate(dt);
      newOpportunity.setMyExtId__c("UPSERTID001");

      // Parent Account record must already exist
      Account parentAccountRef = new Account();
      parentAccountRef.setMyExtId__c("SAP111111");
      newOpportunity.setAccount(parentAccountRef);

      SaveResult[] results = connection
            .upsert("MyExtId__c", new SObject[] { newOpportunity });
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

C# Example

```
public void upsertForeignKeySample()
{
   try
   {
      Opportunity newOpportunity = new Opportunity();
      newOpportunity.Name = "UpsertOpportunity";
      newOpportunity.StageName = "Prospecting";
      DateTime dt = (DateTime)binding.getServerTimestamp().timestamp;
      newOpportunity.CloseDate = dt.AddDays(7);
      newOpportunity.CloseDateSpecified = true;
      newOpportunity.MyExtId__c = "UPSERTID001";

      // Parent Account record must already exist
      Account parentAccountRef = new Account();
      parentAccountRef.MyExtId__c = "SAP111111";
      newOpportunity.Account = parentAccountRef;

      SaveResult[] results = binding
            .upsert("MyExtId", new sObject[] { newOpportunity });
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                               e.Message + "\n" + e.StackTrace);
   }
}
```

`upsert()` and Polymorphic Foreign Keys

A polymorphic key is an ID that can refer to more than one type of object as a parent. For example, the `OwnerId` field on the Case object can reference either a User or a Group. Similarly, the `WhoID` field on the Task object can reference either a Contact or a Lead.

With the Enterprise WSDL, such polymorphic foreign key fields are defined as a Name sObject type, so it is not possible to pass in the correct sObject in an `upsert()` call. However, with the Partner WSDL all foreign key fields—including polymorphic ones—are of type sObject , which allows `upsert()` calls on such fields.

Important: If your organization has SOQL Polymorphism enabled, polymorphic relationship fields point to sObjects and not Names in the Enterprise WSDL; therefore, you can pass the correct sObject in a call. SOQL Polymorphism is currently available as a Developer Preview. For more information on enabling SOQL Polymorphism for your organization, contact Salesforce

Sample Code—Java

This sample upserts two accounts using a custom external ID field called `MyExtId__c`. The `upsert()` call matches the accounts based on the `MyExtId__c` field in order to determine whether to create or update the accounts. Before running this sample, change the `MyExtId__c` field name to an existing custom ID field name in your org.

```
public void upsertRecords() {
   SObject[] upserts = new Account[2];

   Account upsertAccount1 = new Account();
   upsertAccount1.setName("Begonia");
```

```
   upsertAccount1.setIndustry("Education");
   upsertAccount1.setMyExtId__c("1111111111");
   upserts[0] = upsertAccount1;

   Account upsertAccount2 = new Account();
   upsertAccount2 = new Account();
   upsertAccount2.setName("Bluebell");
   upsertAccount2.setIndustry("Technology");
   upsertAccount2.setMyExtId__c("2222222222");
   upserts[1] = upsertAccount2;

   try {
      // Invoke the upsert call and save the results.
      // Use External_Id custom field for matching records.
      UpsertResult[] upsertResults = connection.upsert(
                                 "MyExtId__c", upserts);
      for (UpsertResult result : upsertResults) {
         if (result.isSuccess()) {
            System.out.println("\nUpsert succeeded.");
            System.out.println((result.isCreated() ? "Insert" : "Update")
                  + " was performed.");
            System.out.println("Account ID: " + result.getId());
         } else {
            System.out.println("The Upsert failed because: "
                  + result.getErrors()[0].getMessage());
         }
      }
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample upserts two accounts using a custom external ID field called `MyExtId__c`. The `upsert()` call matches the accounts based on the `MyExtId__c` field in order to determine whether to create or update the accounts. Before running this sample, change the `MyExtId__c` field name to an existing custom ID field name in your org.

```
public void upsertRecords()
{
   sObject[] upserts = new Account[2];

   Account upsertAccount1 = new Account();
   upsertAccount1.Name = "Begonia";
   upsertAccount1.Industry = "Education";
   upsertAccount1.MyExtId__c = "1111111111";
   upserts[0] = upsertAccount1;

   Account upsertAccount2 = new Account();
   upsertAccount2 = new Account();
   upsertAccount2.Name = "Bluebell";
   upsertAccount2.Industry = "Technology";
   upsertAccount2.MyExtId__c = "2222222222";
```

```
    upserts[1] = upsertAccount2;

    try
    {
       // Invoke the upsert call and save the results.
       // Use External_Id custom field for matching records.
       UpsertResult[] upsertResults =
             binding.upsert("MyExtId__c", upserts);
       foreach (UpsertResult result in upsertResults)
       {
          if (result.success)
          {
             Console.WriteLine("\nUpsert succeeded.");
             Console.WriteLine(
                   (result.created ? "Insert" : "Update") +
                   " was performed."
             );
             Console.WriteLine("Account ID: " + result.id);
          }
          else
          {
             Console.WriteLine("The Upsert failed because: " +
                   result.errors[0].message);
          }
       }
    }
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                                   e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
`ExternalIDFieldName`	string	Contains the name of the field on this object with the external ID field attribute for custom objects or the idLookup field property for standard objects. The idLookup field property is usually on a field that is the object's ID field or name field, but there are exceptions, so check for the presence of the property in the object you wish to `upsert()`.
`sObjects`	sObject[]	Array of one or more records (maximum of 200) to create or update. All records must have the same object type.

Response

UpsertResult[]

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

create()

update()

API Call Basics

UpsertResult

The `upsert` call returns an array of UpsertResult objects. Each element in the array corresponds to the sObject[] array passed as the `sObjects` parameter in the `upsert()` call. For example, the object returned in the first index in the UpsertResult array matches the object specified in the first index of the sObject[] array.

An UpsertResult object has the following properties:

Name	Type	Description
`created`	boolean	Indicates whether the record was created (`true`) or updated (`false`).
`errors`	Error[]	If errors occurred during the call, an array Error objects, providing the error code and description, is returned.
`id`	ID	If the call succeeded, the field contains the ID of the record that was either updated or created. If there was an error, the field is null. For more information, see ID Field Type.
`success`	boolean	Indicates whether the call succeeded (`true`) or not (`false`) for this object. If your organization has active duplicate rules and a duplicate is detected, the UpsertResult includes an Error with a data type of DuplicateError.

CHAPTER 10 Describe Calls

The following table lists supported describe calls in the API in alphabetical order, and provides a brief description for each. Click a call name to see syntax, usage, and more information for that call.

Note: For a list of API utility calls, see Utility Calls, and for a list of general calls (calls that query, retrieve, or modify data), see Core Calls.

Call	Description
`describeAllTabs()`	Returns information about all the tabs—including Lightning page tabs—available to the logged-in user, regardless of whether the user has chosen to hide tabs in his own user interface via the All Tabs (+) tab customization feature.
`describeAppMenu()`	Retrieves metadata about items either in the Salesforce app navigation menu or the Salesforce drop-down app menu.
`describeApprovalLayout()`	Retrieves metadata about approval layouts for the specified object type.
`describeAvailableQuickActions()`	In API version 28.0, describes details about actions available for a specified parent. In API version 29.0 and greater, describes details about actions available for a specified context.
`describeCompactLayouts()`	Retrieves metadata about compact layouts for the specified object type.
`describeDataCategoryGroups()`	Retrieves available category groups for entities specified in the request.
`describeDataCategoryGroupStructures()`	Retrieves available category groups along with their data category structure for entities specified in the request.
`describeGlobal()`	Retrieves a list of available objects for your organization's data.
`describeGlobalTheme()`	Returns information about both objects and themes available to the current logged-in user.
`describeKnowledge()` Call Name on page 2787	Retrieves the Knowledge language settings in the organization.
`describeLayout()`	Retrieves metadata about page layouts for the specified object type.
`describePrimaryCompactLayouts()`	Retrieves metadata about the primary compact layout for each of the specified object types.
`describeQuickActions()`	Retrieves details about specified actions.
`describeSearchScopeOrder()`	Retrieves an ordered list of objects in the logged-in user's default global search scope, including any pinned objects in the user's search results page.
`describeSObject()`	Retrieves metadata (field list and object properties) for the specified object type. Superseded by `describeSObjects()`.
`describeSObjects()`	An array-based version of describeSObject.

Call	Description
`describeSoftphoneLayout()`	Describes the softPhone layout(s) created for an organization.
`describeTabs()`	Returns information about the standard and custom apps available to the logged-in user, as listed in the Lightning Platform app menu at the top of the page.
`describeTheme()`	Returns information about themes available to the current logged-in user.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

describeAllTabs()

Returns information about all the tabs—including Lightning page tabs—available to the logged-in user, regardless of whether the user has chosen to hide tabs in his own user interface via the All Tabs (**+**) tab customization feature.

Syntax

```
DescribeTab [] = connection.describeAllTabs();
```

Usage

Use the `describeAllTabs()` call to obtain information about all the tabs that are available to the logged-in user.

Alternately, use `describeTabs()` if you want information only about the tabs that display in the Salesforce user interface for the logged-in user.

Sample Code—Java

This sample calls `describeAllTabs()`, which returns an array of DescribeTab results.

```
public void describeAllTabsSample() {
  try {
    // Describe tabs
    DescribeTab[] tabs = connection.describeAllTabs();
    System.out.println("There are " + tabs.length +
        " tabs available to you.");

      // Iterate through the returned tabs
      for (int j = 0; j < tabs.length; j++) {
        DescribeTab tab = tabs[j];
        System.out.println("\tTab " + (j + 1) + ":");
        System.out.println("\t\tName: " + tab.getName());
        System.out.println("\t\t\tAssociated SObject" + tab.getSobjectName());
        System.out.println("\t\tLabel: " + tab.getLabel());
```

```
        System.out.println("\t\tURL: " + tab.getUrl());
        DescribeColor[] tabColors = tab.getColors();
        // Iterate through tab colors as needed
        DescribeIcon[] tabIcons = tab.getIcons();
        // Iterate through tab icons as needed
      }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

None.

Response

DescribeTab

describeAppMenu()

Retrieves metadata about items either in the Salesforce app navigation menu or the Salesforce drop-down app menu. This call is available in API version 29.0 and later.

If you're accessing the API using a custom community URL, the `describeAppMenu()` call retrieves the tab set associated with the community ID you specify.

Syntax

```
DescribeAppMenuResult describeResult = connection.describeAppMenu(String appMenuType,
String networkId);
```

Code Sample—Java

This code sample shows how to get the menu items from the Salesforce app navigation menu.

```
public void describeAppMenu() {
    try {
        //The following two lines are equivalent
        DescribeAppMenuResult describe = connection.describeAppMenu("Salesforce1", "");
       DescribeAppMenuResult appMenu = getClient().describeAppMenu(AppMenuType.Salesforce1);


        for (DescribeAppMenuItem menuItem : appMenu.getAppMenuItems()) {

            if (menuItem.getType() == "Tab.apexPage") {

                String visualforceUrl = menuItem.getContent();
```

```
                System.out.println("URL to Visualforce page: " + visualforceUrl);

            }

        }

    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Arguments

Name	Type	Description
appMenuType	string	Restricts the menu data returned to the specified menu type. Valid values are: • AppSwitcher—to retrieve the data from the Salesforce drop-down app menu • Salesforce1—to retrieve the data from the Salesforce app navigation menu • NetworkTabs—to retrieve the data from a community tab set
networkId	ID	If the appMenuType is set to NetworkTabs, enter the ID of the community to retrieve the tab set from. If appMenuType is not NetworkTabs, this field must be null or empty.

Response

DescribeAppMenuResult

Faults

InvalidOrNullForRestrictedPicklist

DescribeAppMenuResult

The describeAppMenu() call returns a list of menu items contained in the specified menu type. The following types are available in API version 29.0 and later.

Name	Type	Description
appMenuItems	DescribeAppMenuItem[]	Array of one or more menu items in the selected menu type.

DescribeAppMenuItem

Each DescribeAppMenuItem object has these fields:

Name	Type	Description
`colors`	DescribeColor[]	Array of color information used for the tab associated with the menu item.
`content`	string	Information that helps build the menu item. Each menu item has a different type of content for this field. For example, the Salesforce app menu type could contain: • FlexiPage—the ID of the Lightning page • Visualforce tab—the URL to the page, such as `/apex/myApexPage`. Menu items of types other than these don't use this field.
`icons`	DescribeIcon[]	Array of icon information used for the tab associated with the menu item.
`label`	string	The display label of the menu item.
`name`	string	API name of the menu item.
`type`	string	The type of menu item, and its subtype, if any. Possible values for the Salesforce app menu type are: • Standard.Dashboards—Dashboards menu item • Standard.Feed—Chatter feed menu item • Standard.Today—the Today menu item • Standard.Tasks—Tasks menu item • Tab.apexPage—a Visualforce tab menu item • Tab.flexipage—a Lightning page tab menu item
`url`	string	The Salesforce URL the menu item should point to. For the Salesforce app menu type, this field is `null` for the Dashboards, Feed, Today, Tasks, and Lightning page menu items.

describeApprovalLayout()

Retrieves metadata about approval layouts for the specified object type.

Syntax

```
DescribeApprovalLayoutResult approvalLayoutResult = connection.describeApprovalLayout(string
 sObjectType, string[] approvalProcessNames);
```

Usage

Use this call to retrieve information about the approval layout for a given object type. Each approval process has one approval layout.

If you supply a null value for `approvalProcessNames`, all the approval layouts for the object are returned, instead of the approval layout of each specified approval process.

Sample Code—Java

This sample shows how to get the approval layouts of an Account sObject. It calls `describeApprovalLayout()` with the name of the sObject type to describe. After getting the approval layouts, the sample prints the name and fields found for each approval layout.

```
public void describeApprovalLayoutSample() {
  try {
    String objectToDescribe = "Account";
    DescribeApprovalLayoutResult approvalLayoutResult =
      connection.describeApprovalLayout(objectToDescribe, null);
    System.out.print("There are " + approvalLayoutResult.getApprovalLayouts().length);
    System.out.println(" approval layouts for the " + objectToDescribe + " object.");

    // Get all the approval layouts for the sObject
    for (int i = 0; i < approvalLayoutResult.getApprovalLayouts().length; i++) {
      DescribeApprovalLayout aLayout = approvalLayoutResult.getApprovalLayouts()[i];
      System.out.println(" There is an approval layout with name: " + aLayout.getName());

      DescribeLayoutItem[] layoutItems = aLayout.getLayoutItems();
      System.out.print(" There are " + layoutItems.length);
      System.out.println(" fields in this approval layout.");
      for (int j = 0; j < layoutItems.length; j++) {
        System.out.print("This approval layout has a field with name: ");
        System.out.println(layoutItems[j].getLabel());
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

Name	Type	Description
`sObjectType`	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.
`approvalProcessNames`	string[]	Optional array of the approval process API names to return approval layout metadata for.

Response

DescribeApprovalLayoutResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DescribeApprovalLayoutResult

The `describeApprovalLayout()` call returns a DescribeApprovalLayoutResult object containing top-level record type information about the passed-in `sObjectType`. Your client application can traverse this object to retrieve detailed metadata about the approval layout.

Name	Type	Description
`approvalLayouts`	DescribeApprovalLayout[]	List of all the approval layouts in use by the object.

DescribeApprovalLayout

Represents an individual item in the DescribeApprovalLayout list.

Name	Type	Description
`id`	ID	Unique ID of this ApprovalLayout. For information on IDs, see ID Field Type.
`label`	string	Label of the approval layout.
`layoutItems`	DescribeLayoutItem[]	Array of one or more fields assigned to the approval layout.
`name`	string	API name of the approval layout.

describeAvailableQuickActions()

In API version 28.0, describes details about actions available for a specified parent. In API version 29.0 and greater, describes details about actions available for a specified context.

Syntax

```
DescribeAvailableQuickActionResult [] = connection.describeAvailableQuickActions(string
parentOrContextType );
```

Usage

Use `describeAvailableQuickActions()` to get the list of actions whose parent (API version 28.0) or context (API version 29.0 and greater) entity name is supplied as well as standard and global actions. The `describeAvailableQuickActions()` call uses the parent entity name, such as "Account", or "null" for global actions, or in API version 29.0 and greater, the context, to return an array of DescribeAvailableQuickActionResult.

Sample—Java

This sample retrieves and displays the available action information for the Account object.

```
public void example() throws Exception {
    DescribeAvailableQuickActionResult[] aResult =
        conn.describeAvailableQuickActions("Account");
    for(DescribeAvailableQuickActionResult ar : aResult) {
        System.out.println("Action label: " + ar.getLabel());
        System.out.println("Action name: " + ar.getName());
        System.out.println("Action type: " + ar.getType());
    }
}
```

Arguments

Name	Type	Description
parentOrContextType	string	Either a standard or custom object. • The parentType applies only to API version 28.0. • The contextType applies to API version 29.0 and greater.

Response

An array of DescribeAvailableQuickActionResult objects.

Faults

connection.exception errors

DescribeAvailableQuickActionResult

The describeAvailableQuickActions() call returns an array of DescribeAvailableQuickActionResult objects. In API version 28.0, each DescribeAvailableQuickActionResult object represents details about actions available for a specified parent. In API version 29.0 and greater, each DescribeAvailableQuickActionResult object represents details about actions available for a specified context.

Name	Type	Description
actionEnumOrId	string	The unique ID for the action. If the action doesn't have an ID, its API name is used. This field is available in API version 35.0 and later.
label	string	The action label.
name	string	The action name.
type	string	• LogACall

Name	Type	Description
		• `SocialPost` • `Canvas` • `Create` • `VisualforcePage` • `Update`

describeCompactLayouts()

Retrieves metadata about compact layouts for the specified object type.

Syntax

```
DescribeCompactLayoutsResult compactLayoutResult = connection.describeCompactLayouts(string
 sObjectType, ID[] recordTypeId);
```

Usage

Use this call to retrieve information about the compact layout for a given object type. This call returns metadata about a given compact layout, including the record type mappings. For more information about compact layouts, see the Salesforce online help.

Sample Code—Java

This sample shows how to get the compact layouts of an Account sObject. It calls `describeCompactLayouts()` with the name of the sObject type to describe. After getting the compact layouts, the sample prints the images, fields, and action buttons found for each compact layout. Next, it prints the system default compact layout for the object, then the mapping information of record types to compact layouts.

```
public void testDescribeCompactLayoutsSample() {
    try {
        String objectToDescribe = "Account";
        DescribeCompactLayoutsResult compactLayoutResult = connection
                .describeCompactLayouts(objectToDescribe, null);
        System.out.println("There are " + compactLayoutResult.getCompactLayouts().length
                + " compact layouts for the " + objectToDescribe + " object.");

        // Get all the compact layouts for the sObject
        for (int i = 0; i < compactLayoutResult.getCompactLayouts().length; i++) {
            DescribeCompactLayout cLayout = compactLayoutResult.getCompactLayouts()[i];
          System.out.println(" There is a compact layout with name: " + cLayout.getName());

            DescribeLayoutItem[] fieldItems = cLayout.getFieldItems();
           System.out.println(" There are " + fieldItems.length + " fields in this compact
 layout.");

            // Write field items
```

```
            for (int j = 0; j < fieldItems.length; j++) {
                System.out.println(j + " This compact layout has a field with name: " +
fieldItems[j].getLabel());
            }

            DescribeLayoutItem[] imageItems = cLayout.getImageItems();
            System.out.println(" There are " + imageItems.length + " image fields in this
 compact layout.");

            // Write the image items
            for (int j = 0; j < imageItems.length; j++) {
               System.out.println(j + " This compact layout has an image field with name:
 " + imageItems[j].getLabel());
            }

            DescribeLayoutButton[] actions = cLayout.getActions();
            System.out.println(" There are " + actions.length + " buttons in this compact
 layout.");

            // Write the action buttons
            for (int j = 0; j < actions.length; j++) {
                System.out.println(j + " This compact layout has a button with name: " +
actions[j].getLabel());
            }

            System.out.println("This object's default compact layout is: "
                    + compactLayoutResult.getDefaultCompactLayoutId());

            RecordTypeCompactLayoutMapping[] mappings =
compactLayoutResult.getRecordTypeCompactLayoutMappings();
            System.out.println("There are " + mappings.length + " record type to compact
layout mapping for the "
                    + objectToDescribe + " object.");
            for (int j = 0; j < mappings.length; j++) {
                System.out.println(j + " Record type " + mappings[j].getRecordTypeId()
                        + " is mapped to compact layout " +
mappings[j].getCompactLayoutId());
            }
        }

    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }

}
```

Arguments

Name	Type	Description
sObjectType	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.

Name	Type	Description
recordTypeId	ID[]	Optional parameter that restricts the compact layout data returned to the specified record types.

Response

DescribeCompactLayoutsResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

DescribeCompactLayoutsResult

The `describeCompactLayouts()` call returns a DescribeCompactLayoutsResult object containing top-level record type information about the passed-in `sObjectType`, as well as a mapping of record types to compact layouts. Your client application can traverse this object to retrieve detailed metadata about the compact layout.

Name	Type	Description
compactLayouts	DescribeCompactLayout[]	List of all the compact layouts in use by the object.
defaultCompactLayoutId	ID	ID of the primary compact layout assigned to the object.
recordTypeCompactLayoutMappings	RecordTypeCompactLayoutMapping[]	Record type mapping(s) for the object. The compact layouts associated with the object may be mapped to more than one record type.

DescribeCompactLayout

Represents an individual item in the DescribeCompactLayout list.

Name	Type	Description
actions	DescribeLayoutButton[]	Array of one or more DescribeLayoutButton items assigned to the compact layout. This list is set by Salesforce and is read-only.
fieldItems	DescribeLayoutItem[]	Array of one or more fields assigned to the compact layout.
id	ID	Unique ID of this CompactLayout. For information on IDs, see ID Field Type.
imageItems	DescribeLayoutItem[]	Array of one or more images assigned to the compact layout. This list is set by Salesforce and is read-only.
label	string	Label of the compact layout.

Name	Type	Description
name	string	API name of the compact layout.
objectType	string	The name of the object to which the compact layout is assigned.

RecordTypeCompactLayoutMapping

Represents a single record type mapping in the `recordTypeCompactLayoutMappings` field in a DescribeCompactLayoutsResult object. This object is a map of valid `recordTypeId` to `compactLayoutId`.

Name	Type	Description
available	boolean	Indicates whether this record type is available (`true`) or not (`false`). Availability is used to display a list of available record types to the user when they are creating a new record.
compactLayoutId	ID	ID of the compact layout associated with this record type.
compactLayoutName	string	API name of the compact layout.
recordTypeName	string	API name of the record type.
recordTypeId	ID	ID of the record type.

describeDataCategoryGroups()

Retrieves available category groups for objects specified in the request.

Syntax

```
DescribeDataCategoryGroupResult[] = connection.describeDataCategoryGroups()(string[]
sObjectTypes);
```

Usage

Use this call to describe the available category groups for the objects specified in the request. This call can be used with the `describeDataCategoryGroupStructures()` call to describe all the categories available for a specific object. For additional information about data categories, see "Data Categories in Salesforce.com" in the Salesforce online help.

Sample Code—Java

This sample shows how to retrieve the data category groups associated with:

- Salesforce Knowledge articles
- Questions from the Answers feature

It returns the name, label and description of a category group and the name of the associated `sobject` (article or question). It also returns the number of data categories in the data category group.

```
public void describeDataCategoryGroupsSample() {
                try {
                // Make the describe call for data category groups
                DescribeDataCategoryGroupResult[] results =
                connection.describeDataCategoryGroups(new String[] {
                "KnowledgeArticleVersion", "Question"});

                // Get the properties of each data category group
                for (int i = 0; i < results.length; i++) {
                System.out.println("sObject: " +
                results[i].getSobject());
                System.out.println("Group name: " +
                results[i].getName());
                System.out.println("Group label: " +
                results[i].getLabel());
                System.out.println("Group description: " +
                (results[i].getDescription()==null? "" :
                results[i].getDescription()));
                System.out.println("Number of categories: " +
                results[i].getCategoryCount());
                }
                } catch (ConnectionException ce) {
                ce.printStackTrace();
                }
                }
```

Sample Code—C#

This sample shows how to retrieve the data category groups associated with:

- Salesforce Knowledge articles
- Questions from the Answers feature

It returns the name, label and description of a category group and the name of the associated `sobject` (article or question). It also returns the number of data categories in the data category group.

```
public void describeDataCategoryGroups() {
                try {
                // Make the describe call for data category groups
                DescribeDataCategoryGroupResult[] results =
                binding.describeDataCategoryGroups(new String[] {
                "KnowledgeArticleVersion", "Question"});

                // Get the properties of each data category group
                for (int i = 0; i < results.Length; i++) {
                Console.WriteLine("sObject: " +
                results[i].sobject);
                Console.WriteLine("Group name: " +
                results[i].name);
                Console.WriteLine("Group label: " +
                results[i].label);
```

```
Console.WriteLine("Group description: " +
(results[i].description==null? "" :
results[i].description));
Console.WriteLine("Number of categories: " +
results[i].categoryCount);
}
} catch (SoapException e) {
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
sObjectTypes	string[]	The specified value can be: • KnowledgeArticleVersion—to retrieve category groups associated with article types. • Question—to retrieve category groups associated with questions. For additional information about articles and questions, see "Work with Articles and Translations" and "Answers Overview" in the Salesforce online help.

Response

DescribeDataCategoryGroupResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

DescribeDataCategoryGroupResult

The describeDataCategoryGroups() call returns a DescribeDataCategoryGroupResult object containing the list of the category groups associated with the specified objects.

Name	Type	Description
categoryCount	int	The number of visible data categories in the data category group.
description	string	The description of the data category group.
label	string	Label for the data category group in the Salesforce user interface.
name	string	The unique name used for API access to the data category group .
sobject	string	The object associated with the data category group.

describeDataCategoryGroupStructures()

Retrieves available category groups along with their data category structure for objects specified in the request.

Syntax

```
describeDataCategoryGroupStructures()[] = connection.
               describeDataCategoryGroupStructures()(DataCategoryGroupSObjectTypePair[]
 pairs, boolean topCategoriesOnly)
```

Usage

Use this call to return the visible data category structure for the given object category group pairs. First use `describeDataCategoryGroups()` to find the available category groups for the objects specified. From the returned list, choose the object category group pairs to pass as the input in `describeDataCategoryGroupStructures()`. This call returns all the visible categories and data category structure as output. For additional information about data categories and data category visibility, see "Data Categories in Salesforce.com" and "Data Category Visibility" in the Salesforce online help.

Sample Code—Java

This sample shows how to use sObject and data category group pairs to retrieve data categories for each pair. It calls `describeDataCategoryGroupStructures()` with two pairs, KnowledgeArticleVersion/Regions and Question/Regions, and iterates through the results of this call. It gets the top categories for each result, which is "All", and then gets the first-level child categories. The sample requires that you set up a data category group called *`Regions`* with some child categories and associate it with a knowledge article and questions. Alternatively, you can replace the data category group name in the sample if you want to use an existing data category group in your org that has a different name.

```
public void describeDataCateogryGroupStructuresSample() {
                try {
                // Create the data category pairs
                DataCategoryGroupSobjectTypePair pair1 =
                new DataCategoryGroupSobjectTypePair();
                DataCategoryGroupSobjectTypePair pair2 =
                new DataCategoryGroupSobjectTypePair();
                pair1.setSobject("KnowledgeArticleVersion");
                pair1.setDataCategoryGroupName("Regions");
                pair2.setSobject("Question");
                pair2.setDataCategoryGroupName("Regions");

                DataCategoryGroupSobjectTypePair[] pairs =
                new DataCategoryGroupSobjectTypePair[] {
                pair1,
                pair2
                };

                // Get the list of top level categories using the describe call
                DescribeDataCategoryGroupStructureResult[] results =
                connection.describeDataCategoryGroupStructures(
```

```
pairs,
false
);

// Iterate through each result and get some properties
// including top categories and child categories
for (int i = 0; i < results.length; i++) {
DescribeDataCategoryGroupStructureResult result =
results[i];
String sObject = result.getSobject();
System.out.println("sObject: " + sObject);
System.out.println("Group name: " + result.getName());
System.out.println("Group label: " + result.getLabel());
System.out.println("Group description: " +
result.getDescription());

// Get the top-level categories
DataCategory[] topCategories = result.getTopCategories();

// Iterate through the top level categories and retrieve
// some information
for (int j = 0; j < topCategories.length; j++) {
DataCategory topCategory = topCategories[j];
System.out.println("Category name: " +
topCategory.getName());
System.out.println("Category label: " +
topCategory.getLabel());
DataCategory [] childCategories =
topCategory.getChildCategories();
System.out.println("Child categories: ");
for (int k = 0; k < childCategories.length; k++) {
System.out.println("\t" + k + ". Category name: " +
childCategories[k].getName());
System.out.println("\t" + k + ". Category label: " +
childCategories[k].getLabel());
}
}
}
} catch (ConnectionException ce) {
ce.printStackTrace();
}
}
```

Sample Code—C#

This sample shows how to use sObject and data category group pairs to retrieve data categories for each pair. It calls `describeDataCategoryGroupStructures()` with two pairs, KnowledgeArticleVersion/Regions and Question/Regions, and iterates through the results of this call. It gets the top categories for each result, which is "All", and then gets the first-level child categories. The sample requires that you set up a data category group called *Regions* with some child categories and associate it with a knowledge article and questions. Alternatively, you can replace the data category group name in the sample if you want to use an existing data category group in your org that has a different name.

```
public void describeDataCateogryGroupStructuresSample() {
                try {
                // Create the data category pairs
                DataCategoryGroupSobjectTypePair pair1 =
                new DataCategoryGroupSobjectTypePair();
                DataCategoryGroupSobjectTypePair pair2 =
                new DataCategoryGroupSobjectTypePair();
                pair1.sobject = "KnowledgeArticleVersion";
                //pair1.setDataCategoryGroupName("Regions");
                pair1.dataCategoryGroupName = "KBArticleCategories";
                pair2.sobject = "Question";
                //pair2.setDataCategoryGroupName("Regions");
                pair2.dataCategoryGroupName = "KBArticleCategories";

                DataCategoryGroupSobjectTypePair[] pairs =
                new DataCategoryGroupSobjectTypePair[] {
                pair1,
                pair2
                };

                // Get the list of top level categories using the describe call
                DescribeDataCategoryGroupStructureResult[] results =
                binding.describeDataCategoryGroupStructures(
                pairs,
                false
                );

                // Iterate through each result and get some properties
                // including top categories and child categories
                for (int i = 0; i < results.Length; i++) {
                DescribeDataCategoryGroupStructureResult result =
                results[i];
                String sObject = result.sobject;
                Console.WriteLine("sObject: " + sObject);
                Console.WriteLine("Group name: " + result.name);
                Console.WriteLine("Group label: " + result.label);
                Console.WriteLine("Group description: " +
                result.description);

                // Get the top-level categories
                DataCategory[] topCategories = result.topCategories;

                // Iterate through the top level categories and retrieve
                // some information
                for (int j = 0; j < topCategories.Length; j++) {
                DataCategory topCategory = topCategories[j];
                Console.WriteLine("Category name: " +
                topCategory.name);
                Console.WriteLine("Category label: " +
                topCategory.label);
                DataCategory [] childCategories =
                topCategory.childCategories;
```

```
Console.WriteLine("Child categories: ");
for (int k = 0; k < childCategories.Length; k++) {
Console.WriteLine("\t" + k + ". Category name: " +
childCategories[k].name);
Console.WriteLine("\t" + k + ". Category label: " +
childCategories[k].label);
}
}
}
}
catch (SoapException e)
{
Console.WriteLine("An unexpected error has occurred: " +
e.Message + "\n" + e.StackTrace);
}
}
```

Arguments

Name	Type	Description
pairs	DataCategoryGroupSObjectTypePair[]	Specifies a category group and an object to query. Visible data categories are retrieved for that object.
topCategoriesOnly	boolean	Indicates whether the call returns only the top (true) or all the categories (false) visible depending on the user's data category group visibility settings. For more information on data category group visibility, see Data Category Visibility in the Salesforce online help.

DataCategoryGroupSObjectTypePair contains the following fields:

Name	Type	Description
dataCategoryGroupName	string	The unique name used for API access to the data category group.
sobject	string	The object associated with the data category group

Response

describeDataCategoryGroupStructures()[]

Faults

InvalidSObjectFault

UnexpectedErrorFault

describeDataCategoryGroupStructures()

The describeDataCategoryGroupStructures() call returns an array of DescribeDataCategoryGroupStructureResult objects containing the category groups and categories associated with the specified objects.

Name	Type	Description
description	string	The description of the data category group.
label	string	The label for the data category group in the Salesforce user interface.
name	string	The unique name used for API access to the data category group.
sobject	string	The object associated with the data category group.
topCategories	DataCategory[]	A list of top level categories visible depending on the user's data category group visibility settings. For more information on data category group visibility, see "Data Category Visibility" in the Salesforce online help.

DataCategory

Name	Type	Description
childDataCategories	DataCategory[]	A recursive list of visible sub categories in the data category.
label	string	The label for the data category in the Salesforce user interface.
name	string	The unique name used for API access to the data category.

describeGlobal()

Retrieves a list of available objects for your organization's data.

Syntax

```
DescribeGlobalResult = connection.describeGlobal();
```

Usage

Use `describeGlobal()` to obtain a list of available objects for your organization. You can then iterate through this list and use `describeSObjects()` to obtain metadata about individual objects.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization's data. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample shows how to perform a global describe. It then retrieves the sObjects from the global describe result and writes their names to the console.

```
public void describeGlobalSample() {
    try {
        // Make the describeGlobal() call
        DescribeGlobalResult describeGlobalResult =
            connection.describeGlobal();

        // Get the sObjects from the describe global result
        DescribeGlobalSObjectResult[] sobjectResults =
            describeGlobalResult.getSobjects();

        // Write the name of each sObject to the console
        for (int i = 0; i < sobjectResults.length; i++) {
          System.out.println(sobjectResults[i].getName());
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample shows how to perform a global describe. It then retrieves the sObjects from the global describe result and writes their names to the console.

```
public void describeGlobalSample()
{
    try
    {
        // Make the describeGlobal() call
        DescribeGlobalResult dgr = binding.describeGlobal();

        // Get the sObjects from the describe global result
        DescribeGlobalSObjectResult[] sObjResults = dgr.sobjects;

        // Write the name of each sObject to the console
        for (int i = 0; i < sObjResults.Length; i++)
        {
            Console.WriteLine(sObjResults[i].name);
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

None.

Response

DescribeGlobalResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

describeSObjects()

API Call Basics

Using the Partner WSDL

https://developer.salesforce.com/page/Sample_SOAP_Messages

DescribeGlobalResult

The `describeGlobal()` call returns a `DescribeGlobalResult` object, which has the following properties.

Name	Type	Description
`encoding`	string	Specifies how an org's data is encoded, such as `UTF-8` or `ISO-8859-1`.
`maxBatchSize`	int	Maximum number of records allowed in a `create()`, `update()`, or `delete()` call.
`sobjects`	DescribeGlobalSObjectResult[]	List of result objects that returns information about the available objects for your org. Available in API version 17.0 and later. This property enhances the information that was previously available in the `types` property.
`types`	string[]	List of available objects for your org. You iterate through this list to retrieve the object string that you pass to `describeSObjects()`. Beginning with API version 17.0, this property is no longer supported. Use the `name` property in DescribeGlobalSObjectResult instead.

DescribeGlobalSObjectResult

Represents the properties for one of the objects available for your org. Each object has the following properties:

Name	Type	Description
`activateable`	boolean	Reserved for future use.

Name	Type	Description
createable	boolean	Indicates whether the object can be created via the create() call (true) or not (false).
custom	boolean	Indicates whether the object is a custom object (true) or not (false).
customSetting	boolean	Indicates whether the object is a custom setting object (true) or not (false).
deletable	boolean	Indicates whether the object can be deleted via the delete() call (true) or not (false).
deprecatedAndHidden	boolean	Reserved for future use.
feedEnabled	boolean	Indicates whether Chatter feeds are enabled for the object (true) or not (false). This property is available in API version 19.0 and later.
keyPrefix	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of 001 and Opportunity objects have a prefix of 006. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object. Use the value of this field to determine the object type of a parent in those cases where the child may have more than one object type as parent (polymorphic). For example, you may need to obtain the keyPrefix value for the parent of a Task or Event.
label	string	Label text for a tab or field renamed in the user interface, if applicable, or the object name, if not. For example, an organization representing a medical vertical might rename Account to Patient. Tabs and fields can be renamed in the Salesforce user interface. See the Salesforce online help for more information.
labelPlural	string	Label text for an object that represents the plural version of an object name, for example, "Accounts."
layoutable	boolean	Indicates whether the object supports the describeLayout() call (true) or not (false).
mergeable	boolean	Indicates whether the object can be merged with other objects of its type (true) or not (false). true for leads, contacts, and accounts.
mruEnabled	boolean	Indicates whether Most Recently Used (MRU) list functionality is enabled for the object (true) or not (false).
name	string	Name of the object. This name is equivalent to an entry in the types list that is no longer supported, beginning with API version 17.0.
queryable	boolean	Indicates whether the object can be queried via the query() call (true) or not (false).
replicateable	boolean	Indicates whether the object can be replicated via the getUpdated() and getDeleted() calls (true) or not (false).
retrieveable	boolean	Indicates whether the object can be retrieved via the retrieve() call (true) or not (false).

Name	Type	Description
`searchable`	boolean	Indicates whether the object can be searched via the `search()` call (`true`) or not (`false`).
`triggerable`	boolean	Indicates whether the object supports Apex triggers.
`undeletable`	boolean	Indicates whether an object can be undeleted using the `undelete()` call (`true`) or not (`false`).
`updateable`	boolean	Indicates whether the object can be updated via the `update()` call (`true`) or not (`false`).

describeGlobalTheme()

Returns information about both objects and themes available to the current logged-in user.

Syntax

```
DescribeGlobalTheme = connection.describeGlobalTheme();
```

Usage

Use `describeGlobalTheme()` to get both a list of available objects and theme information about those objects for your organization. `describeGlobalTheme()` is a combination of `describeGlobal()` and `describeTheme()` combined into a single call.

Your client application must be logged in with sufficient access rights to retrieve theme and object information about your organization's data. For more information, see Factors that Affect Data Access.

`describeGlobalTheme()` is available in API version 29.0 and later.

Sample

This Java sample calls `describeGlobalTheme()` and then iterates over the retrieved object and theme information.

```
public static void describeGlobalThemeExample() {
    try {
        // Get current theme and object information
        DescribeGlobalTheme globalThemeResult = connection.describeGlobalTheme();
        DescribeGlobalResult globalResult = globalThemeResult.getGlobal();
        DescribeThemeResult globalTheme = globalThemeResult.getTheme();
        // For the themes, get the array of theme items, one per object
        DescribeThemeItem[] themeItems = globalTheme.getThemeItems();
        for (int i = 0; i < themeItems.length; i++) {
            DescribeThemeItem themeItem = themeItems[i];
            System.out.println("Theme information for object " + themeItem.getName());
            // Get color and icon info for each themeItem
            DescribeColor colors[] = themeItem.getColors();
            System.out.println("    Number of colors: " + colors.length);
```

```
            int k;
            for (k = 0; k < colors.length; k++) {
                DescribeColor color = colors[k];
                System.out.println("    For Color #" + k + ":");
                System.out.println("      Web RGB Color: " + color.getColor());
                System.out.println("      Context: " + color.getContext());
                System.out.println("      Theme: " + color.getTheme());
            }
            DescribeIcon icons[] = themeItem.getIcons();
            System.out.println("    Number of icons: " + icons.length);
            for (k = 0; k < icons.length; k++) {
                DescribeIcon icon = icons[k];
                System.out.println("    For Icon #" + k + ":");
                System.out.println("      ContentType: " + icon.getContentType());
                System.out.println("      Height: " + icon.getHeight());
                System.out.println("      Theme: " + icon.getTheme());
                System.out.println("      URL: " + icon.getUrl());
                System.out.println("      Width: " + icon.getWidth());
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Response

DescribeGlobalTheme

Faults

`UnexpectedErrorFault`

SEE ALSO:

- DescribeGlobalTheme
- DescribeThemeResult
- DescribeThemeItem
- DescribeColor
- DescribeIcon

DescribeGlobalTheme

The `describeGlobalTheme()` call returns DescribeGlobalTheme, which contains a DescribeThemeResult and a DescribeGlobalResult.

Name	Type	Description
`global`	DescribeGlobalResult	Object information.
`theme`	DescribeThemeResult	Theme information.

`describeKnowledge()` Call Name

Retrieves the Knowledge language settings in the organization.

Syntax

```
KnowledgeSettings result = _connection.describeKnowledgeSettings();
```

Usage

Use this call to describe the existing Knowledge language settings, including the default Knowledge language, supported languages, and a list of Knowledge language information. You can also use KnowledgeSettings in the Metadata API to obtain similar information.

Sample Code—Java

This sample shows how to retrieve the Knowledge language settings. It returns the default Knowledge language, a list of Knowledge supported language, including the language code and whether is an active Knowledge language.

```
public void describeKnowledgeSettingsSampl e() {
try {

// Make the describe call for KnowledgeSettings
KnowledgeSettings result = connection.describeKnowledgeSettings();

// Get the properties of KnowledgeSettings
System.out.println("Knowledge default language: " + result.getDefaultLanguage());
for (KnowledgeLanguageItem lang : result.getLanguages()) {
System.out.println("Language: " + lang.getName());
System.out.println("Active: " + lang.isActive());
}
} catch (ConnectionException ex) {
ex.printStackTrace();
}
}
```

Sample Code—C#

This sample shows how to retrieve the Knowledge language settings. It returns the default Knowledge language, a list of Knowledge supported language, including the language code and whether is an active Knowledge language.

```
public void describeKnowledgeSettingsSampl e() {
try {

// Make the describe call for KnowledgeSettings
KnowledgeSettings result = connection.describeKnowledgeSettings();

// Get the properties of KnowledgeSettings
Console.WriteLine("Knowledge default language: " + result.getDefaultLanguage());
for (KnowledgeLanguageItem lang : result.getLanguages()) {
Console.WriteLine("Language: " + lang.getName());
```

```
Console.WriteLine("Active: " + lang.isActive());
}
} catch (SoapException ex) {
ex.printStackTrace();
}
}
```

Response

KnowledgeSettings

describeLayout()

Retrieves metadata about page layouts for the specified object type.

Syntax

```
DescribeLayoutResult = connection.describeLayout(string sObjectType, string layoutName,
ID recordTypeID[]);
```

Usage

Use this call to retrieve information about the layout (presentation of data to users) for a given object type. This call returns metadata about a given page layout, such as the detail page layout, the edit page layout, and the record type mappings. For additional information, see “Page Layouts” in the Salesforce online help.

Generally, user profiles have one layout associated with each object. In Enterprise, Unlimited, and Performance Editions, user profiles can have multiple layouts per object, where each layout is specific to a given record type. This call returns metadata for multiple layouts, if applicable.

Layouts can be further customized in standard objects that have defined named layouts, which are separate from the primary layout for both the profile and the record type. One example of named layouts is the UserAlt layout defined on the User object, which is consumed in the Salesforce app instead of the primary User layout. New layout names can only be defined by Salesforce, but customization of named layouts is controlled by administrators in the same way as primary layouts.

If you supply a null value for `recordTypeIds`, all the layouts for that user are returned, instead of just the layouts for each specified record type. The same layout may be associated with multiple record types for the user’s profile, in which case there would only be one layout returned.

Note: This call is an advanced API call that is typically used only by partners who have written custom page rendering code for generating output on a specialized device (for example, on PDAs) and need to examine the layout details of an object before rendering the page output.

Use the following procedure to describe layouts:

1. To display a detail page or edit page for a record that already exists, a client application first gets the `recordTypeIds` from the record, then it finds the layoutId associated with that `recordTypeIds` (through recordTypeMapping), and finally it uses that layout information to render the page.

2. To display the create version of an edit page, a client application first determines whether more than one record type is available and, if so, presents the user with a choice. Once a record type has been chosen, then the client application uses the layout information to render the page. It uses the picklist values from the RecordTypeMapping to display valid picklist values for picklist fields.
3. A client application can access the labels for the layout, using the DescribeLayoutResult.

The following restrictions apply to person account record types:

- `describeLayout()` for version 7.0 and below will return the default business account record type as the default record type even if the tab default is a person account record type. In version 8.0 and after, it will always be the tab default.
- `describeLayout()` for version 7.0 and below will not return any person account record types.

For more information about person account record types, see Person Account Record Types.

Sample Code—Java

This sample shows how to get the layouts of an Account sObject. It calls `describeLayout()` with the name of the sObject type to describe. It doesn't specify record type IDs as a third argument, which means that layouts for all record types will be returned if record types are defined in your org for the specified sObject. After getting the layout, the sample writes the number of detail and edit sections found and their headings. Next, it iterates through each edit layout section and retrieves its components.

```
public void describeLayoutSample(){
  try {
      String objectToDescribe = "Account";
      DescribeLayoutResult dlr =
          connection.describeLayout(objectToDescribe, null, null);
      System.out.println("There are " + dlr.getLayouts().length +
          " layouts for the " + objectToDescribe + " object."
      );

      // Get all the layouts for the sObject
      for(int i = 0; i < dlr.getLayouts().length; i++) {
        DescribeLayout layout = dlr.getLayouts()[i];
        DescribeLayoutSection[] detailLayoutSectionList =
          layout.getDetailLayoutSections();
        System.out.println(" There are " +
          detailLayoutSectionList.length +
            " detail layout sections");
        DescribeLayoutSection[] editLayoutSectionList =
          layout.getEditLayoutSections();
        System.out.println(" There are " +
          editLayoutSectionList.length +
          " edit layout sections");

        // Write the headings of the detail layout sections
        for(int j = 0; j < detailLayoutSectionList.length; j++) {
          System.out.println(j +
              " This detail layout section has a heading of " +
              detailLayoutSectionList[j].getHeading());
        }

        // Write the headings of the edit layout sections
        for(int x = 0; x < editLayoutSectionList.length; x++) {
          System.out.println(x +
              " This edit layout section has a heading of " +
```

```
                editLayoutSectionList[x].getHeading());
        }

        // For each edit layout section, get its details.
        for(int k = 0; k < editLayoutSectionList.length; k++) {
          DescribeLayoutSection els =
            editLayoutSectionList[k];
          System.out.println("Edit layout section heading: " +
              els.getHeading());
          DescribeLayoutRow[] dlrList = els.getLayoutRows();
            System.out.println("This edit layout section has " +
                dlrList.length + " layout rows.");
            for(int m = 0; m < dlrList.length; m++) {
              DescribeLayoutRow lr = dlrList[m];
              System.out.println(" This row has " +
                  lr.getNumItems() + " layout items.");
              DescribeLayoutItem[] dliList = lr.getLayoutItems();
              for(int n = 0; n < dliList.length; n++) {
                DescribeLayoutItem li = dliList[n];
                if ((li.getLayoutComponents() != null) &&
                  (li.getLayoutComponents().length > 0)) {
                  System.out.println("\tLayout item " + n +
                      ", layout component: " +
                      li.getLayoutComponents()[0].getValue());
                }
                else {
                System.out.println("\tLayout item " + n +
                      ", no layout component");
                }
              }
            }
         }
      }

      // Get record type mappings
      if (dlr.getRecordTypeMappings() != null) {
        System.out.println("There are " +
            dlr.getRecordTypeMappings().length +
            " record type mappings for the " +
            objectToDescribe + " object"
        );
      } else {
        System.out.println(
            "There are no record type mappings for the " +
            objectToDescribe + " object."
        );
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample shows how to get the layouts of an Account sObject. It calls `describeLayout()` with the name of the sObject type to describe. It doesn't specify record type IDs as a third argument, which means that layouts for all record types will be returned if record types are defined in your org for the specified sObject. After getting the layout, the sample writes the number of detail and edit sections found and their headings. Next, it iterates through each edit layout section and retrieves its components.

```
public void describeLayoutSample()
{
    try
    {
        String objectToDescribe = "Account";
        DescribeLayoutResult dlr =
            binding.describeLayout(objectToDescribe, null, null);
        Console.WriteLine("There are " + dlr.layouts.Length +
            " layouts for the " + objectToDescribe + " object."
        );

        // Get all the layouts for the sObject
        for (int i = 0; i < dlr.layouts.Length; i++)
        {
            DescribeLayout layout = dlr.layouts[i];
            DescribeLayoutSection[] detailLayoutSectionList =
                layout.detailLayoutSections;
            Console.WriteLine(" There are " +
                detailLayoutSectionList.Length +
                " detail layout sections");
            DescribeLayoutSection[] editLayoutSectionList =
                layout.editLayoutSections;
            Console.WriteLine(" There are " +
                editLayoutSectionList.Length +
                " edit layout sections");

            // Write the headings of the detail layout sections
            for (int j = 0; j < detailLayoutSectionList.Length; j++)
            {
                Console.WriteLine(j +
                    " This detail layout section has a heading of " +
                    detailLayoutSectionList[j].heading);
            }

            // Write the headings of the edit layout sections
            for (int x = 0; x < editLayoutSectionList.Length; x++)
            {
                Console.WriteLine(x +
                    " This edit layout section has a heading of " +
                    editLayoutSectionList[x].heading);
            }

            // For each edit layout, get its details.
            for (int k = 0; k < editLayoutSectionList.Length; k++)
            {
                DescribeLayoutSection els =
                    editLayoutSectionList[k];
```

```
                Console.WriteLine("Edit layout section heading: " +
                        els.heading);
                DescribeLayoutRow[] dlrList = els.layoutRows;
                Console.WriteLine("This edit layout section has " +
                        dlrList.Length + " layout rows.");
                for (int m = 0; m < dlrList.Length; m++)
                {
                    DescribeLayoutRow lr = dlrList[m];
                    Console.WriteLine(" This row has " +
                        lr.numItems + " layout items.");
                    DescribeLayoutItem[] dliList = lr.layoutItems;
                    for (int n = 0; n < dliList.Length; n++)
                    {
                        DescribeLayoutItem li = dliList[n];
                        if ((li.layoutComponents != null) &&
                                (li.layoutComponents.Length > 0))
                        {
                            Console.WriteLine("\tLayout item " + n +
                                    ", layout component: " +
                                li.layoutComponents[0].value);
                        }
                        else
                        {
                            Console.WriteLine("\tLayout item " + n +
                                    ", no layout component");
                        }
                    }
                }
            }

            // Get record type mappings
            if (dlr.recordTypeMappings != null)
            {
                Console.WriteLine("There are " +
                    dlr.recordTypeMappings.Length +
                    " record type mappings for the " +
                    objectToDescribe + " object");
            }
            else
            {
                Console.WriteLine(
                    "There are no record type mappings for the " +
                    objectToDescribe + " object.");
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sObjectType	string	The specified value must be a valid object for your organization. If the object is a person account, specify Account, or if it is a person contact, specify Contact.
layoutName	string	The specified value must be a valid named layout for this object. Layout names are obtained from namedLayoutInfos in DescribeSObjectResult. The entity name is not valid because the primary layout is not considered "named."
recordTypeIds	ID[]	Optional parameter restricts the layout data returned to the specified record types. To retrieve the layout for the master record type, specify the value 012000000000000AAA for the recordTypeIds regardless of the object. This value is returned in the recordTypeInfos for the master record type in the DescribeSObjectResult. Note that a SOQL query returns a null value, not 012000000000000AAA. For information on IDs, see ID Field Type.

Response

DescribeLayoutResult

Faults

InvalidSObjectFault

UnexpectedErrorFault

SEE ALSO:

API Call Basics

https://developer.salesforce.com/page/Sample_SOAP_Messages

DescribeLayoutResult

The describeLayout() call returns a DescribeLayoutResult object containing top-level record type information about the passed-in sObjectType, as well as a mapping of record types to layouts. Your client application can traverse this object to retrieve detailed metadata about the layout.

Tip: If you have actions in the publisher enabled in your organization, you can retrieve the layout definition for a global publisher layout by using Global as the sObjectType and null as the recordTypeId.

Name	Type	Description
feedView	DescribeLayoutFeedView[]	Feed view related layout data for a feed-based layout. This field is null for page layouts that are not feed-based.
layouts	DescribeLayout[]	Layout(s) associated with the specified sObjectType. In general, there is a one-to-one correspondence between

Name	Type	Description
		layouts and objects. However, in some cases, an object will have multiple layouts in the context of a given user profile.
`recordTypeMappings`	RecordTypeMapping[]	Record type mapping(s) available for the user. The objects on a user profile can have multiple record types. All record types are returned, not just those available to the calling user. This allows the client application to display a layout appropriate for a given user profile. For example, suppose User A owns a record, and this record has record type X set. If User B tries to view this record, then the client application can display the record using the layout associated with this record type for User B's profile (even if the record type is not available for the user).
`recordTypeSelectorRequired`	boolean	If `true`, a record type selector page is required; if `false`, use the default record type.

DescribeLayout

Represents a specific layout for the specified `sObjectType`. Each `DescribeLayout` is referenced by its unique layout ID and consists of two types of views (represented in this object as arrays of DescribeLayoutSection):

- **Detail view**—Read-only display of the object. In a detail layout, certain pieces of information (such as address details) might be aggregated into a single DescribeLayoutItem.
- **Edit view**—Editable display of the object. In an edit layout, individual pieces of information (such as an address) will be broken up into separate fields.

An individual DescribeLayout consists of these fields:

Name	Type	Description
`buttonLayoutSection`	DescribeLayoutButtonSection	Standard and custom button sections associated with the specified layout.
`detailLayoutSections`	DescribeLayoutSection[]	Layout section(s) for the detail view.
`editLayoutSections`	DescribeLayoutSection[]	Layout section(s) for the edit view.
`highlightsPanelLayoutSection`	DescribeLayoutSection[]	Layout section(s) for the highlights panel view.
`multirowEditLayoutSections`	DescribeLayoutSection[]	Layout section(s) for the multiline layout view. This field is available in API version 35.0 and later.
`id`	ID	Unique ID of this layout. For information on IDs, see ID Field Type.
`quickActionList`	DescribeQuickActionListResult	List of actions associated with the specified layout. This field is available in API version 28.0 and later.
`relatedContent`	RelatedContent	Mobile Cards section associated with the specified layout. This field is available in API version 29.0 and later.

Name	Type	Description
relatedLists	RelatedList[]	Related list(s) associated with the specified layout.
saveOptions	DescribeLayoutSaveOption[]	List of save options for the layout.

DescribeLayoutButtonSection

Represents one of two sections of the layout containing either standard or custom buttons.

Name	Type	Description
detailButtons	DescribeLayoutButton[]	Standard or custom button(s) associated with the specified button section.

DescribeLayoutButton

Represents a single standard button, custom button, or custom link in a DescribeLayout.

Name	Type	Description
behavior	WebLinkWindowType	What the button or link does when clicked, such as execute JavaScript or open its content source in a new window, for example. This field is available in API version 31.0 and later.
colors	DescribeColor[]	Array of color information for icons associated with this button or link. Each color is associated with a theme. This field is available in API version 32.0 and later.
content	string	The API name of the Visualforce page or s-control being delivered. This field is available in API version 31.0 and later.
contentSource	WebLinkType	The content source of the custom button or link. The contentSource for a standard button which hasn't been overridden is null. This field is available in API version 31.0 and later.
custom	boolean	Required. Indicates whether this is a custom button or link (true) or not (false).
encoding	string	Type of encoding assigned to the URL called by the button or link. Valid values are: • UTF-8—Unicode (UTF-8) • ISO-8859-1—General US & Western Europe (ISO-8859–1, ISO-LATIN-1) • Shift_JIS—Japanese (Shift-JIS) • ISO-2022-JP—Japanese (JIS)

Name	Type	Description
		• `EUC-JP`—Japanese (EUC-JP) • `x-SJIS_0213`—Japanese (Shift-JIS_2004) • `ks_c_5601-1987`—Korean (ks_c_5601-1987) • `Big5`—Traditional Chinese (Big5) • `GB2312`—Simplified Chinese (GB2312) • `Big5-HKSCS`—Traditional Chinese Hong Kong (Big5–HKSCS) This field is available in API version 31.0 and later.
`height`	int	The height (in pixels) when a button or link's `behavior` field value is set to `newWindow`, `sidebar`, or `noSidebar`. This field is available in API version 31.0 and later.
`icons`	DescribeIcon[]	Array of icons for this button or link. Each icon is associated with a theme. This field is available in API version 29.0 and later.
`label`	string	Label for the button or link displayed in the Salesforce user interface.
`menubar`	boolean	Indicates whether the menu bar displays (`true`) or not (`false`) when a button or link's `behavior` field value is set to `newWindow`. This field is available in API version 31.0 and later.
`name`	string	API name of the button or link.
`overridden`	boolean	Required. Indicates whether a standard button has been overridden (`true`) or not (`false`). This field is available in API version 31.0 and later.
`resizeable`	boolean	Indicates whether the new window is resizeable (`true`) or not (`false`) when a button or link's `behavior` field value is set to `newWindow`. This field is available in API version 31.0 and later.
`scrollbars`	boolean	Indicates whether scrollbars display (`true`) or not (`false`) when a button or link's `behavior` field value is set to `newWindow`. This field is available in API version 31.0 and later.
`showsLocation`	boolean	Indicates whether the address bar displays (`true`) or not (`false`) when a button or link's `behavior` field value is set to `newWindow`. This field is available in API version 31.0 and later.

Name	Type	Description
showsStatus	boolean	Indicates whether the status bar displays (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
toolbar	boolean	Indicates whether the toolbars display (true) or not (false) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
url	string	The URL called by the button or link. This field is null for standard buttons in a related list. This field is available in API version 31.0 and later.
width	int	The width (in pixels) when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.
windowPosition	WebLinkPosition	Indicates the window position when a button or link's behavior field value is set to newWindow. This field is available in API version 31.0 and later.

DescribeLayoutComponent

Represents the smallest unit in a layout—a field or a separator. To reference a field for display, a client application uses the following notation to reference a field in the `describeSObjects()` call: `LayoutComponent.`*`fieldName`*.

In API version 31.0 and later, DescribeLayoutComponent is extended with FieldLayoutComponent if both the LayoutComponentType value is `Field`, and the field being described is either the compound field `Address` or the compound field `Person Name`.

Name	Type	Description
displayLines	int	The number of vertical lines displayed for a field in the edit view. Applies to textarea and multi-select picklist fields.
tabOrder	int	Indicates the tab order for the item in the row.
type	LayoutComponentType	The LayoutComponentType for this LayoutComponent.
value	string	Value of this LayoutComponent. The name of the field if the LayoutComponentType value is Field. The API name of the canvas app if the LayoutComponentType value is Canvas.

DescribeLayoutFeedFilter

Represents an individual feed filter option that you can use to filter the feed.

Name	Type	Description
label	string	The label of the filter.
name	string	The API name of the filter.
type	FeedLayoutFilterType enum	Standard feed filter types: • AllUpdates • FeedItemType

DescribeLayoutFeedView

Represents the layout of the feed view for a feed-based page layout.

Name	Type	Description
feedFilters	DescribeLayoutFeedFilter[]	Lists the feed filter options that are displayed with the feed.

DescribeLayoutItem

Represents an individual item in a DescribeLayoutRow. A DescribeLayoutItem consists of a set of components (DescribeLayoutComponent), each of which is either a field or a separator. For most fields on a layout, there is only one component per layout item. However, in a display-only view, the DescribeLayoutItem might be a composite of the individual fields (for example, an address can consist of street, city, state, country, and postal code data). On the corresponding edit view, each component of the address field would be split up into separate DescribeLayoutItems.

Name	Type	Description
editable	boolean	Indicates whether this DescribeLayoutItem can be edited (`true`) or not (`false`). This field is available in API version 30.0 and below. It was replaced by the `editableForNew` and `editableForUpdate` fields in API version 31.0.
editableForNew	boolean	Indicates whether a new DescribeLayoutItem can be edited when creating a new record (`true`) or not (`false`). This field is available in API version 31.0 and later.
editableForUpdate	boolean	Indicates whether an existing DescribeLayoutItem can be edited when editing a record (`true`) or not (`false`). This field is available in API version 31.0 and later.
label	string	Label text for this DescribeLayoutItem.
layoutComponents	DescribeLayoutComponent[]	DescribeLayoutComponent for this DescribeLayoutItem.
placeholder	boolean	Indicates whether this DescribeLayoutItem is a placeholder (`true`) or not (`false`). If `true`, then this DescribeLayoutItem is blank.

Name	Type	Description
`required`	boolean	Indicates whether this DescribeLayoutItem is required (`true`) or not (`false`). This is useful to know if, for example, you wanted to render required fields in a contrasting color (such as red).

DescribeLayoutRow

Represents a row in a DescribeLayoutSection. A DescribeLayoutRow consists of one or more DescribeLayoutItem objects. For each DescribeLayoutRow, a DescribeLayoutItem refers either to a specific field or to an "empty" DescribeLayoutItem (a DescribeLayoutItem that contains no DescribeLayoutComponent objects). An empty DescribeLayoutItem can be returned when a given DescribeLayoutRow is sparse (for example, containing more fields on the right column than on the left column). Where there are gaps in the layout, an empty DescribeLayoutItem is returned as a placeholder.

Name	Type	Description
`layoutItems`	DescribeLayoutItem[]	Refers to either a specific field or to an empty LayoutItem (a LayoutItem that contains no DescribeLayoutComponent objects).
`numItems`	int	Number of `layoutItems`. This information is redundant but, due to a bug in a popular SOAP toolkit, was required to avoid serialization problems.

DescribeLayoutSection

Represents a section of a DescribeLayout and consists of one or more columns and one or more rows (an array of DescribeLayoutRow).

Name	Type	Description
`columns`	int	Number of columns in this DescribeLayoutSection.
`heading`	string	Heading text (label) for this DescribeLayoutSection.
`layoutRows`	DescribeLayoutRow[]	Array of one or more DescribeLayoutRow objects.
`parentLayoutId`	ID	The ID of the layout upon which this DescribeLayoutSection resides. This field is available in API version 35.0 and later.
`rows`	int	Number of rows in this DescribeLayoutSection.
`tabOrder`	string	Indicates the tab order for the fields in the section in the edit view. Valid values are: • LeftToRight • TopToBottom This field is available in API version 31.0 and later.
`useCollapsibleSection`	boolean	Indicates whether this DescribeLayoutSection is a collapsible section, also known as a "twistie" (`true`), or not (`false`).

Name	Type	Description
`useHeading`	boolean	Indicates whether to display the `heading` (`true`) or not (`false`).

DescribeQuickActionListResult

Represents a list of actions assigned to the page layout. Available in API version 28.0 and later.

Name	Type	Description
`quickActionListItems`	DescribeQuickActionListItemResult[]	Array of zero or more QuickActionListItemResult objects.

DescribeQuickActionListItemResult

Represents a QuickAction assigned to the actions list for a page layout. Available in API version 28.0 and later.

Name	Type	Description
`colors`	DescribeColor[]	Array of color information. Each color is associated with a theme. This field is available in API version 29.0 and later.
`iconUrl`	string	The URL of the icon associated with the action. This icon URL corresponds to the 32x32 icon used for the current Salesforce theme, introduced in Spring '10.
`icons`	DescribeIcon[]	Array of icons for this action. Each icon is associated with a theme. This field is available in API version 29.0 and later.
`label`	string	The label of the action.
`miniIconUrl`	string	The URL of the mini icon associated with the action. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring '10.
`quickActionName`	string	The API name of the action.
`targetSobjectType`	string	The API name of the action's target object.
`type`	string	The QuickActionType of the action. Valid values are: • Create • VisualforcePage

CustomLinkComponent

When the LayoutComponentType value is `CustomLink`, this type contains information about a single custom link on the page layout.

Name	Type	Description
`customLink`	DescribeLayoutButton	A single LayoutComponent object of type `CustomLink`.

FieldLayoutComponent

Extends the information returned by DescribeLayoutComponent. When the LayoutComponentType value is `Field`, and the field being described is an `Address` or `Person Name` field, FieldLayoutComponent includes information about the field's components.

Available in API version 31.0 and later.

Name	Type	Description
`components`	DescribeLayoutComponent[]	Array of zero or more LayoutComponent objects of type `Field`.
`fieldType`	FieldType	The field type.

Sample Code for Usage of FieldLayoutComponent

```
        DescribeLayoutComponent layoutComponent = layoutComponents[n];
        // Look for a component representing the BillingAddress field
        if (layoutComponent.getType() == LayoutComponentType.Field.toString() &&
        layoutComponent.getValue().equals("BillingAddress") {
        // Cast this component as a FieldLayoutComponent
        DescribeLayoutComponent.FieldLayoutComponent addressFieldComponent =
(FieldLayoutComponent)layoutComponent;
        // At this point you can access addressFieldComponent
FieldLayoutComponent-specific methods such as getComponents() or
getFieldType()
        }
```

LayoutComponentType

Represents the type for a DescribeLayoutComponent. Contains one of these values:

- `AnalyticsCloud`—An Analytics dashboard on the page layout. Available in API version 34.0 and later.
- `Canvas`—A canvas component on the page layout. This layout component type is available in API version 31.0 and later.
- `CustomLink`—A custom link on the page layout.
- `EmptySpace`—A blank space on the page layout.
- `ExpandedLookup`—An Expanded Lookup component in the Mobile Cards section of the page layout.
- `Field`—Field name. A mapping to the `name` field on the describeSObjectResult.
- `ReportChart`—A report chart on the page layout.
- `SControl`—Reserved for future use.
- `Separator`—Separator character, such as a semicolon (:) or slash (/).
- `VisualforcePage`—A Visualforce component on the page layout.

PicklistForRecordType

Represents a single record type picklist in a RecordTypeMapping. The `picklistName` matches up with the `name` attribute of each field in the `fields` array in describeSObjectResult. The `picklistValues` are the set of acceptable values for the `recordType`.

Name	Type	Description
picklistName	string	Name of the picklist.
picklistValues	PicklistEntry[]	Set of picklist values associated with the recordTypeIds in the RecordTypeMapping. **Note:** If you retrieve picklistValues, the validFor value is null. If you need the validFor value, get it from the PicklistEntry object obtained from the Field object associated with the DescribeSObjectResult.

RecordTypeMapping

Represents a single record type mapping in the recordTypeMappings field in a DescribeLayoutResult object. This object is a map of valid recordTypeIds to layoutId. For displaying a detail view, a client application uses this mapping to determine which layout is associated with the record type on the record. For displaying an edit view, a client application uses this mapping to determine which layout to use (and possibly to allow the user to choose between multiple record types); it will also determine the set of available picklist values.

Name	Type	Description
available	boolean	Indicates whether this record type is available (true) or not (false). Availability is used to display a list of available record types to the user when they are creating a new record.
defaultRecordTypeMapping	boolean	Indicates whether this is the default record type mapping (true) or not (false).
layoutId	ID	ID of the layout associated with this record type.
name	string	Name of this record type.
picklistsForRecordType	PicklistForRecordType[]	Record type picklist(s) mapped to the recordTypeIds.
recordTypeId	ID	ID of this record type.

Note: Some fields previously in this result have moved to RecordTypeInfo.

RelatedContent

Represents the Mobile Cards section in a DescribeLayout. Available in API version 29.0 and later.

Name	Type	Description
relatedContentItems	DescribeRelatedContentItem[]	An array of items in the Mobile Cards section of the page layout.

DescribeRelatedContentItem

Represents an individual item in the DescribeRelatedContentItem list. Available in API version 29.0 and later.

Name	Type	Description
`describeLayoutItem`	DescribeLayoutItem	An individual layout item in the Mobile Cards section. Must be wrapped in a DescribeRelatedContentItem to be added to the Mobile Cards section.

RelatedList

Represents a single related list in a DescribeLayoutResult.

Name	Type	Description
`buttons`	DescribeLayoutButton[]	Buttons associated with this related list. This field is available in API version 32.0 and later.
`columns`	RelatedListColumn[]	Columns associated with this related list. You can pair this value with Field to achieve a number of useful tasks, including determining whether the field is: • A name field, in order to present a link to the detail • Sortable, (to allow the user to include it in an `ORDER BY` clause to sort the rows by the given column • A currency field, to include the currency symbol or code
`custom`	boolean	If `true`, this related list is custom.
`field`	string	Name of the field on the related (associated) object that establishes the relationship with the associating object. For example, for the Contact related list on Account, the value is `AccountId`.
`label`	string	Label for the related list, displayed in the Salesforce user interface.
`limitRows`	int	Number of rows to display.
`name`	string	Name of the ChildRelationship in the DescribeSObjectResult for the `sObjectType` which was provided as the argument to DescribeLayout.
`sobject`	string	Name of the `sObjectType` that is the row type for rows within this related list.
`sort`	RelatedListSort[]	If not null, the column(s) that should be used to order the related objects.

RelatedListColumn

Represents a single field in a related list returned by DescribeLayoutResult.

Name	Type	Description
field	string	API name of the field. This value is always of the form ***object_type.field_name***. For example, if name is Contact.Account.Owner.Alias, then this value is User.Alias.
fieldApiName	string	SOQL field syntax for the field in relation to the main sObject for the related list. This value is always of the form ***object_type.field_name***. Unlike name, it doesn't return a value in the Translating Results format.
format	string	Display in date or dateTime format.
label	string	Label of the field.
lookupId	string	Optional SOQL field syntax to retrieve the lookup ID value for the main related list sObject. This value may be an expression that uses SOQL relationship query dot notation. For example, if the related list sObjectType is Case and the column display value is Owner.Alias, then the lookup ID value would be Owner.Id.
name	string	SOQL field syntax for the field in relation to the main sObject for the related list. This value may be an expression that uses SOQL relationship query dot notation, or it may use the Translating Results or convertCurrency() format. For example, if the related list sObjectType is Case, then the value might be Owner.Alias or it might be toLabel(Case.Status).

RelatedListSort

Represents the sorting preference for objects in the related list.

Name	Type	Description
column	string	Name of the field that is used to order the related objects.
ascending	boolean	If true, sort order is ascending. If false, descending.

Although in most cases there is only one RelatedListSort in the array, for some special standard related lists, there is more than one. If there is more than one, the RelatedListSorts are ordered according to how they should be included in a corresponding SOQL query, for example:

```
ORDER BY relatedListSort[0].getColumn() DIRECTION, relatedListSort[1].getColumn() DIRECTION
```

DescribeLayoutSaveOption

Represents the save options for the layout. Save options define behavior that occurs when objects are created or modified using the given layout. For example, for Cases and Leads, a “UseDefaultAssignmentRule” save option is exposed to control whether assignment rules are applied when Cases or Leads are created or edited.

Name	Type	Description
defaultValue	boolean	Default value for the save option. Controls whether the save option defaults to enabled or not in the Salesforce user interface. For example, for the "UseDefaultAssignmentRule" save option, if `defaultValue` is `true`, then by default the system triggers the default assignment rules when an Account, Case, or Lead is created or edited. If `false`, then the default assignment rules aren't applied when an Account, Case, or Lead is created or edited, unless the user enables the save option in the Salesforce user interface.
isDisplayed	boolean	If `true`, then the save option is displayed in the layout. If `false`, then the save option isn't displayed in the layout.
label	string	Label for the save option that is displayed in the Salesforce user interface.
name	string	API name for the save option.
restHeaderName	string	The corresponding REST API header for the save option.
soapHeaderName	string	The corresponding SOAP API header for the save option.

WebLinkPosition

Represents the window position for a new window opened upon clicking a DescribeLayoutButton. Applies only to custom buttons. Available in API version 31.0 and later. Contains one of these values:

- `fullScreen`—The new window opens in a full screen. If this option is selected, any width or height parameters set for the new window are ignored.
- `none`—No window position preference is set.
- `topLeft`—The new window opens, positioned at the top left of the screen.

WebLinkType

Represents the content being delivered by the custom button. Contains one of these values:

- `javascript`
- `page`—Visualforce page
- `sControl`
- `url`

WebLinkWindowType

Represents the behavior for a DescribeLayoutButton. Applies only to custom buttons. Available in API version 31.0 and later. Contains one of these values:

- `newWindow`—The custom button's content opens in a new browser window.
- `noSidebar`—The custom button's content displays in the existing browser window without a sidebar.
- `onClickJavaScript`—Valid only when the DescribeLayoutButton's `contentSource` field value is `javascript`. Clicking the button or link executes JavaScript.
- `replace`—The custom button's content displays in the existing browser window without a sidebar or header.
- `sidebar`—The custom button's content displays in the existing browser window with a sidebar.

describePrimaryCompactLayouts()

Retrieves metadata about the primary compact layout for each of the specified object types. Information returned is limited to 100 objects.

Syntax

```
DescribeCompactLayout[] primaryCompactLayouts =
connection.describePrimaryCompactLayouts(string[] sObjectType)
```

Usage

Use this call to retrieve information about the primary compact layout for the given object types. This call returns metadata about a given primary compact layout. For more information about compact layouts, see the Salesforce Help.

Sample Code—Java

```
public void testDescribePrimaryCompactLayoutsSample() {
  try {
    String[] objectsToDescribe = new String[] {"Account","Lead"};
      DescribeCompactLayout[] primaryCompactLayouts =
connection.describePrimaryCompactLayouts(objectsToDescribe);

      for (int i = 0; i < primaryCompactLayouts.length; i++) {
        DescribeCompactLayout cLayout = primaryCompactLayouts[i];
        System.out.println(" There is a compact layout with name: " + cLayout.getName());


        // Write the objectType
        System.out.println(" This compact layout is the primary compact layout for: " +
cLayout.getObjectType());

        DescribeLayoutItem[] fieldItems = cLayout.getFieldItems();
        System.out.println(" There are " + fieldItems.length + " fields in this compact
layout.");

        // Write field items
```

```
        for (int j = 0; j < fieldItems.length; j++) {
          System.out.println(j + " This compact layout has a field with name: " +
fieldItems[j].getLabel());
        }

        DescribeLayoutItem[] imageItems = cLayout.getImageItems();
        System.out.println(" There are " + imageItems.length + " image fields in this
compact layout.");

        // Write the image items
        for (int j = 0; j < imageItems.length; j++) {
          System.out.println(j + " This compact layout has an image field with name: " +
imageItems[j].getLabel());
        }

        DescribeLayoutButton[] actions = cLayout.getActions();
        System.out.println(" There are " + actions.length + " buttons in this compact
layout.");

        // Write the action buttons
        for (int j = 0; j < actions.length; j++) {
          System.out.println(j + " This compact layout has a button with name: " +
actions[j].getLabel());
        }
      }

    } catch (ConnectionException ce) {
      ce.printStackTrace();
  }
}
```

Arguments

Name	Type	Description
`sObjectTypes`	string[]	An array of one or more objects. The specified values must be valid objects for your organization.

Response

DescribeCompactLayout

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

`describeQuickActions()`

Retrieves details about specified actions.

Syntax

```
DescribeQuickActionResult[] = connection.describeQuickActions(string[] quickActionNames);
```

Usage

Use the `describeQuickActions()` call to retrieve details for specified actions. In API version 28.0, the `describeQuickActions()` call takes the action name in the form of *`ParentEntity.ActionName`*. In API version 29.0 and greater, it takes the action name in the form of *`ContextEntity.ActionName`*. Returns an array of DescribeQuickActionResult. You might first call `describeAvailableQuickActions()` for a list of actions available for a specified context and then use `describeQuickActions()` to obtain details about specific actions.

Sample—Java

This sample retrieves and displays publisher action details for a create action on the Account object.

```
public void example() throws Exception {
    DescribeQuickActionResult[] result =
        conn.describeQuickActions(new String[]
            { "Account.QuickCreateContact", "Account.QuickCreateTask" });
    for(DescribeQuickActionResult r : result) {
        assert r != null;
    DescribeQuickActionDefaultValue [] describeQuickActionDefaultValues =
r.getDefaultValues();
    for(DescribeQuickActionDefaultValue defaultValue : describeQuickActionDefaultValues)
{
        System.out.println("Target Object Field:  " + defaultValue.getField() );
        System.out.println("Target Object Field's default Value:  " +
defaultValue.getDefaultValue );
}
        System.out.println("Action name: " + r.getName());
        System.out.println("Action label: " + r.getLabel());
        System.out.println("ParentOrContext object: " + r.getSourceSobjectType());
        System.out.println("Target object: " + r.getTargetSobjectType());
        System.out.println("Target object record type: " + r.getTargetRecordTypeId());
        System.out.println("Relationship field: " + r.getTargetParentField());
        System.out.println("Quick action type: " + r.getType());
        System.out.println("VF page name for custom actions: " +
        r.getVisualforcePageName());
        System.out.println("Icon name: " + r.getIconName());
        System.out.println("Icon URL: " + r.getIconUrl());
        System.out.println("Mini icon URL: " + r.getMiniIconUrl());
        assert r.getLayout() != null;
        System.out.println("Height of VF page for custom actions: " + r.getHeight());
        System.out.println("Width of VF page for custom actions: " + r.getWidth());
    }
}
```

Arguments

Name	Type	Description
`quickActions`	string[]	An array of quick actions to be retrieved.

Response

DescribeQuickActionResult

DescribeQuickActionResult

The `describeQuickActions()` call returns an array of DescribeQuickActionResult objects. Each DescribeQuickActionResult object represents a quick action for a specified object.

Name	Type	Description
`actionEnumOrId`	string	The unique ID for the action. If the action doesn't have an ID, its API name is used. This field is available in API version 35.0 and later.
`canvasApplicationName`	string	The name of your Canvas application, if you use it.
`colors`	DescribeColor[]	Array of color information. Each color is associated with a theme. This field is available in API version 29.0 and later.
`defaultValues`	DescribeQuickActionDefaultValue[]	The action's default values.
`height`	int	The height in pixels of the action pane.
`iconName`	string	Name of icon used for the action. If a custom icon is not used, this value will not be set.
`iconUrl`	string	URL of icon used for the action. This icon URL corresponds to the 32x32 icon used for the current Salesforce theme, introduced in Spring '10, or the custom icon, if there is one.
`icons`	DescribeIcon[]	Array of icons. Each icon is associated with a theme. If no custom icon was associated with the quick action and the quick action creates a specific object, the icons will correspond to the icons used for the created object. For example, if the quick action creates an Account, the icon array will contain the icons used for Account. If a custom icon was associated with the quick action, the array will contain that custom icon. This field is available in API version 29.0 and later. API version 32.0 and later returns different icons than in earlier API versions.

Name	Type	Description
label	string	Label of the action.
layout	DescribeLayoutSection	The section of the layout where the action resides.
lightningComponentBundleId	ID	If type is LightningComponent, the ID of the Lightning component bundle called by the action. This field is available in API version 38.0 and later.
lightningComponentBundleName	string	If type is LightningComponent, the name of the Lightning component bundle called by the action. This field is available in API version 38.0 and later.
miniIconUrl	string	The icon's URL. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring '10, or the custom icon, if there is one.
name	string	Name of the action.
contextSobjectType	string	The object used for the action. Named sourceSobjectType in version 29.0 and earlier.
showQuickActionVfHeader	boolean	Whether or not the Visualforce quick action header and footer should be shown. If set to false, then both the header containing the quick action title and the footer containing the Save and Cancel buttons aren't displayed.
targetParentField	string	The parent object type of the action. Links the target object to the parent object. For example, use Account if the target object is Contact and the parent object is Account.
targetRecordTypeId	ID	The record type of the target record.
targetSobjectType	string	The action's target object type.
type	string	The action's type. Valid values are: • Canvas • Create • Flow (This value is available as a Beta in API version 41.0 and later) • LightningComponent (This value is available in API version 38.0 and later.) • LogACall • Post • SendEmail (This value is available in API version 31.0 and later.) • SocialPost • Update • VisualforcePage

Name	Type	Description
visualforcePageName	string	If type is Visualforce, the page name of the associated page for the action.
visualforcePageUrl	string	If type is Visualforce, the URL of the associated page for the action.
width	int	If a custom action is created, this is the width in pixels of the action pane.

DescribeQuickActionDefaultValue

Represents the default values of fields to use in default layouts.

Name	Type	Description
defaultValue	string	The value of the auto-populated default action.
field	string	The field name of the action.

DescribeLayoutSection

Represents a section of a DescribeLayout and consists of one or more columns and one or more rows (an array of DescribeLayoutRow).

Name	Type	Description
columns	int	Number of columns in this DescribeLayoutSection.
heading	string	Heading text (label) for this DescribeLayoutSection.
layoutRows	DescribeLayoutRow[]	Array of one or more DescribeLayoutRow objects.
parentLayoutId	ID	The ID of the layout upon which this DescribeLayoutSection resides. This field is available in API version 35.0 and later.
rows	int	Number of rows in this DescribeLayoutSection.
tabOrder	string	Indicates the tab order for the fields in the section in the edit view. Valid values are: • LeftToRight • TopToBottom This field is available in API version 31.0 and later.
useCollapsibleSection	boolean	Indicates whether this DescribeLayoutSection is a collapsible section, also known as a “twistie” (true), or not (false).
useHeading	boolean	Indicates whether to display the heading (true) or not (false).

DescribeLayoutRow

Represents a row in a DescribeLayoutSection. A DescribeLayoutRow consists of one or more DescribeLayoutItem objects. For each DescribeLayoutRow, a DescribeLayoutItem refers either to a specific field or to an "empty" DescribeLayoutItem (a DescribeLayoutItem that contains no DescribeLayoutComponent objects). An empty DescribeLayoutItem can be returned when a given DescribeLayoutRow is sparse (for example, containing more fields on the right column than on the left column). Where there are gaps in the layout, an empty DescribeLayoutItem is returned as a placeholder.

Name	Type	Description
`layoutItems`	DescribeLayoutItem[]	Refers to either a specific field or to an empty LayoutItem (a LayoutItem that contains no DescribeLayoutComponent objects).
`numItems`	int	Number of `layoutItems`. This information is redundant but, due to a bug in a popular SOAP toolkit, was required to avoid serialization problems.

DescribeLayoutItem

Represents an individual item in a DescribeLayoutRow. A DescribeLayoutItem consists of a set of components (DescribeLayoutComponent), each of which is either a field or a separator. For most fields on a layout, there is only one component per layout item. However, in a display-only view, the DescribeLayoutItem might be a composite of the individual fields (for example, an address can consist of street, city, state, country, and postal code data). On the corresponding edit view, each component of the address field would be split up into separate DescribeLayoutItems.

Name	Type	Description
`editable`	boolean	Indicates whether this DescribeLayoutItem can be edited (`true`) or not (`false`). This field is available in API version 30.0 and below. It was replaced by the `editableForNew` and `editableForUpdate` fields in API version 31.0.
`editableForNew`	boolean	Indicates whether a new DescribeLayoutItem can be edited when creating a new record (`true`) or not (`false`). This field is available in API version 31.0 and later.
`editableForUpdate`	boolean	Indicates whether an existing DescribeLayoutItem can be edited when editing a record (`true`) or not (`false`). This field is available in API version 31.0 and later.
`label`	string	Label text for this DescribeLayoutItem.
`layoutComponents`	DescribeLayoutComponent[]	DescribeLayoutComponent for this DescribeLayoutItem.
`placeholder`	boolean	Indicates whether this DescribeLayoutItem is a placeholder (`true`) or not (`false`). If `true`, then this DescribeLayoutItem is blank.
`required`	boolean	Indicates whether this DescribeLayoutItem is required (`true`) or not (`false`). This is useful to know if, for example, you wanted to render required fields in a contrasting color (such as red).

DescribeLayoutComponent

Represents the smallest unit in a layout—a field or a separator. To reference a field for display, a client application uses the following notation to reference a field in the `describeSObjects()` call: `LayoutComponent.fieldName`.

Name	Type	Description
`displayLines`	int	The number of vertical lines displayed for a field in the edit view. Applies to `textarea` and multi-select picklist fields.
`tabOrder`	int	Indicates the tab order for the item in the row.
`type`	LayoutComponentType	The LayoutComponentType for this LayoutComponent.
`value`	string	Value of this LayoutComponent. The name of the field if the LayoutComponentType value is `Field`. The API name of the canvas app if the LayoutComponentType value is `Canvas`.

LayoutComponentType

Represents the type for a DescribeLayoutComponent.Contains one of these values:

- `AnalyticsCloud`—An Analytics dashboard on the page layout. Available in API version 34.0 and later.
- `Canvas`—A canvas component on the page layout. This layout component type is available in API version 31.0 and later.
- `CustomLink`—A custom link on the page layout.
- `EmptySpace`—A blank space on the page layout.
- `ExpandedLookup`—An Expanded Lookup component in the Mobile Cards section of the page layout.
- `Field`—Field name. A mapping to the `name` field on the describeSObjectResult.
- `ReportChart`—A report chart on the page layout.
- `SControl`—Reserved for future use.
- `Separator`—Separator character, such as a semicolon (:) or slash (/).
- `VisualforcePage`—A Visualforce component on the page layout.

describeSearchScopeOrder()

Retrieves an ordered list of the objects in a user's default global search scope.

Syntax

```
DescribeSearchScopeOrderResult[] describeSearchScopeOrderResults =
connection.describeSearchScopeOrder();
```

Usage

Use `describeSearchScopeOrder()` to retrieve an ordered list of objects in the default global search scope of a logged-in user. Global search keeps track of which objects the user interacts with and how often and arranges the search results accordingly. Objects used most frequently appear at the top of the list. The returned list reflects the object order in the user's default search scope, including any pinned objects on the user's search results page. This call is useful if you want to implement a custom search results page using the optimized global search scope.

Note: You must enable Chatter to enable global search.

Sample Code—Java

This sample shows how to retrieve the global search scope for a user and then iteratively display the name of each object in the scope.

```
public void describeSearchScopeOrderSample() {
  try {
    //Get the order of objects in search smart scope for the logged-in user
    DescribeSearchScopeOrderResult[] describeSearchScopeOrderResults =
        connection.describeSearchScopeOrder();
    //Iterate through the results and display the name of each object
    for (int i = 0; i < describeSearchScopeOrderResults.length; i++) {
      System.out.println(describeSearchScopeOrderResults[i].getName());
    }
  }
  catch(ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Arguments

None.

Response

An array of DescribeSearchScopeOrderResult objects

Fault

`UnexpectedErrorFault`

SEE ALSO:

API Call Basics

DescribeSearchScopeOrderResult

The `describeSearchScopeOrder()` call returns an array of `DescribeSearchScopeOrderResult` objects. Each `DescribeSearchScopeOrderResult` object represents an object in the user's global search scope. The list reflects the order of the objects in the user's scope, including any pinned objects. The `DescribeSearchScopeOrderResult` object has the following properties.

Name	Type	Description
keyPrefix	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of 001 and Opportunity objects have a prefix of 006. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object.
name	string	Name of the object. English only.

describeSearchLayouts()

Retrieves the search result layout configuration for one or more objects.

Syntax

```
DescribeSearchLayoutResult[] = binding.describeSearchLayouts(string sObjectType[]);
```

Usage

Use `describeSearchLayouts()` to retrieve search layout information for one or more objects. This is handy when you want to create a custom search results page with the same layout settings as in Salesforce.

Sample

This sample shows how to retrieve the search result layout information for a list of objects.

```
public void describeSearchLayoutSample(String[] sObjectTypes) {
        try {
            // Get the search layout of Account and Group
            DescribeSearchLayoutResult[] searchLayoutResults =
connection.describeSearchLayouts(sObjectTypes);
            // Iterate through the results and display the label of each column
            for (int i = 0; i < sObjectTypes.length; i += 1) {
                String sObjectType = sObjectTypes[i];
                DescribeSearchLayoutResult result = searchLayoutResults[i];
                System.out.println("Top label for search results for " + sObjectType + "
is " + result.getLabel() + " and should display " + result.getLimitRows() + " rows");
                System.out.println("Column labels for search results for " + sObjectType
+ " are: ");
                for (DescribeColumn column : result.getSearchColumns()) {
                    System.out.println(column.getLabel());
                }
            }
        } catch (ConnectionException ce) {
            ce.printStackTrace();
        }
    }
```

Arguments

Name	Type	Description
`sObjectType`	string[]	The list of objects you want to obtain search result layout configuration for. For example, if the object is a person account, specify Account, or if it is a person contact, specify Contact. The specified values must be valid objects in your organization. For a complete list of standard objects, see Standard Objects.

Response

DescribeSearchLayoutResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

DescribeSearchLayoutResult

The `describeSearchLayouts()` on page 2815 call returns an array of `DescribeSearchLayoutResult` objects. Each `DescribeSearchLayoutResult` object represents the search layout configuration for each object queried for. The `DescribeSearchLayoutResult` object has the following properties.

Name	Type	Description
`label`	string	The browser title used for the search results page.
`limitRows`	int	The maximum number of rows to be displayed in the first page of search results. This number can be changed by the administrator.
`searchColumns`	DescribeColumn on page 2816[]	The columns associated with the search results for this object.

DescribeColumn

Represents the columns in the search layout configuration for each DescribeSearchLayoutResult object returned by the `describeSearchLayouts()` on page 2815 call.

Name	Type	Description
`field`	string	Field reference in relation to the object it belongs to. For example, “Lead.Phone.”
`format`	string	Field data format. For example, “date”. This value can be null.
`label`	string	Display text for this field in the user interface. For example, “Company Phone” or just “Phone.”

`name`	string	Field name. Use this in your SOQL query or code. For example, “Name.”

describeSObject()

Describes metadata (field list and object properties) for the specified object.

Note: `describeSObjects()` supersedes `describeSObject()`. Use `describeSObjects()` instead of `describeSObject()`.

Syntax

```
DescribeSObjectResult = connection.describeSObject(string sObjectType);
```

Usage

Use `describeSObject()` to obtain metadata for a given object. You can first call `describeGlobal()` to retrieve a list of all objects for your organization, then iterate through the list and use `describeSObject()` to obtain metadata about individual objects.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization's data. For more information, see Factors that Affect Data Access.

Sample Code—Java

This sample calls `describeSObject()` to perform describes on the Account sObject. It retrieves some properties of the sObject describe result, such as the sObject name, label, and fields. It then iterates through the fields and gets the field properties. For picklist fields, it gets the picklist values and for reference fields, it gets the referenced object names. The sample writes the retrieved sObject and field properties to the console.

```
public void describeSObjectSample() {
    try {
        // Make the describe call
        DescribeSObjectResult describeSObjectResult =
            connection.describeSObject("Account");

        // Get sObject metadata
        if (describeSObjectResult != null) {
          System.out.println("sObject name: " +
                  describeSObjectResult.getName());
        if (describeSObjectResult.isCreateable())
            System.out.println("Createable");

        // Get the fields
        Field[] fields = describeSObjectResult.getFields();
        System.out.println("Has " + fields.length + " fields");

        // Iterate through each field and gets its properties
        for (int i = 0; i < fields.length; i++) {
          Field field = fields[i];
```

```
            System.out.println("Field name: " + field.getName());
            System.out.println("Field label: " + field.getLabel());

            // If this is a picklist field, show the picklist values
            if (field.getType().equals(FieldType.picklist)) {
                PicklistEntry[] picklistValues =
                    field.getPicklistValues();
                if (picklistValues != null) {
                  System.out.println("Picklist values: ");
                  for (int j = 0; j < picklistValues.length; j++) {
                    if (picklistValues[j].getLabel() != null) {
                      System.out.println("\tItem: " +
                          picklistValues[j].getLabel()
                      );
                    }
                  }
                }
            }

            // If a reference field, show what it references
            if (field.getType().equals(FieldType.reference)) {
                System.out.println("Field references the " +
                        "following objects:");
                String[] referenceTos = field.getReferenceTo();
                for (int j = 0; j < referenceTos.length; j++) {
                    System.out.println("\t" + referenceTos[j]);
                }
            }
        }
      }
  } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
}
```

Sample Code—C#

This sample calls `describeSObject()` to perform describes on the Account sObject. It retrieves some properties of the sObject describe result, such as the sObject name, label, and fields. It then iterates through the fields and gets the field properties. For picklist fields, it gets the picklist values and for reference fields, it gets the referenced object names. The sample writes the retrieved sObject and field properties to the console.

```
public void describeSObjectSample() {
    try {
        // Make the describe call
        DescribeSObjectResult describeSObjectResult =
            binding.describeSObject("Account");

        // Get sObject metadata
        if (describeSObjectResult != null) {
            Console.WriteLine("sObject name: " +
                    describeSObjectResult.name);
        if (describeSObjectResult.createable)
```

```
            Console.WriteLine("Createable");

        // Get the fields
        Field[] fields = describeSObjectResult.fields;
        Console.WriteLine("Has " + fields.Length + " fields");

        // Iterate through each field and gets its properties
        for (int i = 0; i < fields.Length; i++) {
            Field field = fields[i];
            Console.WriteLine("Field name: " + field.name);
            Console.WriteLine("Field label: " + field.label);

            // If this is a picklist field, show the picklist values
            if (field.type.Equals(fieldType.picklist)) {
                PicklistEntry[] picklistValues =
                    field.picklistValues;
                if (picklistValues != null) {
                    Console.WriteLine("Picklist values: ");
                    for (int j = 0; j < picklistValues.Length; j++) {
                        if (picklistValues[j].label != null) {
                        Console.WriteLine("\tItem: " +
                            picklistValues[j].label);
                        }
                    }
                }
            }

            // If a reference field, show what it references
            if (field.type.Equals(fieldType.reference)) {
                Console.WriteLine("Field references the " +
                      "following objects:");
                String[] referenceTos = field.referenceTo;
                for (int j = 0; j < referenceTos.Length; j++) {
                    Console.WriteLine("\t" + referenceTos[j]);
                }
            }
        }
        }
    } catch (SoapException e) {
        Console.WriteLine("An unexpected error has occurred: " +
            e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

Name	Type	Description
sObjectType	string	Object. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.

Response

DescribeSObjectResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

- describeSObjects()
- describeGlobal()
- API Call Basics
- Using the Partner WSDL
- https://developer.salesforce.com/page/Sample_SOAP_Messages

describeSObjectResult

The `describeSObject()` call returns a `DescribeSObjectResult` object.

> **Note:** `describeSObjects()` supersedes `describeSObject()`. Use `describeSObjects()` instead of `describeSObject()`.

`describeSObjects()`

An array-based version of `describeSObject()`; describes metadata (field list and object properties) for the specified object or array of objects.

> **Note:** Use this call instead of `describeSObject()`.

Syntax

```
DescribeSObjectResult [] = connection.describeSObjects(string sObjectType[] );
```

Usage

Use `describeSObjects()` to obtain metadata for a given object or array of objects. You can first call `describeGlobal()` to retrieve a list of all objects for your organization, then iterate through the list and use `describeSObjects()` to obtain metadata about individual objects. The `describeSObjects()` call is limited to a maximum of 100 objects returned.

Your client application must be logged in with sufficient access rights to retrieve metadata about your organization's data. For more information, see Factors that Affect Data Access.

In organizations where person accounts are enabled, this call shows Accounts as not createable if the profile does not have access to any business account record types.

Sample Code—Java

This sample calls `describeSObjects()` to perform describes on account, contact, and lead. It iterates through the sObject describe results, gets the properties and fields for each sObject in the result, and writes them to the console. For picklist fields, it writes the picklist values. For reference fields, it writes the referenced object names.

```
public void describeSObjectsSample()
{
  try {
    // Call describeSObjectResults and pass it an array with
    // the names of the objects to describe.
    DescribeSObjectResult[] describeSObjectResults =
                       connection.describeSObjects(
                        new String[] { "account", "contact", "lead" });

    // Iterate through the list of describe sObject results
    for (int i=0;i < describeSObjectResults.length; i++)
    {
        DescribeSObjectResult desObj = describeSObjectResults[i];
        // Get the name of the sObject
        String objectName = desObj.getName();
        System.out.println("sObject name: " + objectName);

        // For each described sObject, get the fields
        Field[] fields = desObj.getFields();

        // Get some other properties
        if (desObj.getActivateable()) System.out.println("\tActivateable");

        // Iterate through the fields to get properties for each field
        for(int j=0;j < fields.length; j++)
        {
            Field field = fields[j];
            System.out.println("\tField: " + field.getName());
            System.out.println("\t\tLabel: " + field.getLabel());
            if (field.isCustom())
                System.out.println("\t\tThis is a custom field.");
            System.out.println("\t\tType: " + field.getType());
            if (field.getLength() > 0)
                System.out.println("\t\tLength: " + field.getLength());
            if (field.getPrecision() > 0)
                System.out.println("\t\tPrecision: " + field.getPrecision());

            // Determine whether this is a picklist field
            if (field.getType() == FieldType.picklist)
            {
                // Determine whether there are picklist values
                PicklistEntry[] picklistValues = field.getPicklistValues();
                if (picklistValues != null && picklistValues[0] != null)
                {
                    System.out.println("\t\tPicklist values = ");
                    for (int k = 0; k < picklistValues.length; k++)
                    {
                       System.out.println("\t\t\tItem: " + picklistValues[k].getLabel());
```

```
                    }
                }
            }

            // Determine whether this is a reference field
            if (field.getType() == FieldType.reference)
            {
                // Determine whether this field refers to another object
                String[] referenceTos = field.getReferenceTo();
                if (referenceTos != null && referenceTos[0] != null)
                {
                    System.out.println("\t\tField references the following objects:");
                    for (int k = 0; k < referenceTos.length; k++)
                    {
                        System.out.println("\t\t\t" + referenceTos[k]);
                    }
                }
            }
        }
    }
  } catch(ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

This sample calls `describeSObjects()` to perform describes on account, contact, and lead. It iterates through the sObject describe results, gets the properties and fields for each sObject in the result, and writes them to the console. For picklist fields, it writes the picklist values. For reference fields, it writes the referenced object names.

```
public void describeSObjectsSample()
{
    try
    {
    // Call describeSObjectResults and pass it an array with
    // the names of the objects to describe.
    DescribeSObjectResult[] describeSObjectResults =
                        binding.describeSObjects(
                        new string[] { "account", "contact", "lead" });

    // Iterate through the list of describe sObject results
    foreach (DescribeSObjectResult describeSObjectResult in describeSObjectResults)
    {
        // Get the name of the sObject
        String objectName = describeSObjectResult.name;
        Console.WriteLine("sObject name: " + objectName);

        // For each described sObject, get the fields
        Field[] fields = describeSObjectResult.fields;

        // Get some other properties
```

```
        if (describeSObjectResult.activateable) Console.WriteLine("\tActivateable");

        // Iterate through the fields to get properties for each field
        foreach (Field field in fields)
        {
            Console.WriteLine("\tField: " + field.name);
            Console.WriteLine("\t\tLabel: " + field.label);
            if (field.custom)
                Console.WriteLine("\t\tThis is a custom field.");
            Console.WriteLine("\t\tType: " + field.type);
            if (field.length > 0)
                Console.WriteLine("\t\tLength: " + field.length);
            if (field.precision > 0)
                Console.WriteLine("\t\tPrecision: " + field.precision);

            // Determine whether this is a picklist field
            if (field.type == fieldType.picklist)
            {
                // Determine whether there are picklist values
                PicklistEntry[] picklistValues = field.picklistValues;
                if (picklistValues != null && picklistValues[0] != null)
                {
                    Console.WriteLine("\t\tPicklist values = ");
                    for (int j = 0; j < picklistValues.Length; j++)
                    {
                        Console.WriteLine("\t\t\tItem: " + picklistValues[j].label);
                    }
                }
            }

            // Determine whether this is a reference field
            if (field.type == fieldType.reference)
            {
                // Determine whether this field refers to another object
                string[] referenceTos = field.referenceTo;
                if (referenceTos != null && referenceTos[0] != null)
                {
                    Console.WriteLine("\t\tField references the following objects:");
                    for (int j = 0; j < referenceTos.Length; j++)
                    {
                        Console.WriteLine("\t\t\t" + referenceTos[j]);
                    }
                }
            }
        }
    }
    }
    catch (SoapException e)
    {
        Console.WriteLine("An unexpected error has occurred: " + e.Message
            + "\n" + e.StackTrace);
    }
}
```

Arguments

The `describeSObjects()` call takes in an array of sObjects.

Name	Type	Description
`sObjectType`	string	Object. The specified value must be a valid object for your organization. For a complete list of objects, see Standard Objects.

Response

DescribeSObjectResult

Faults

`InvalidSObjectFault`

`UnexpectedErrorFault`

SEE ALSO:

- describeSObject()
- describeGlobal()
- API Call Basics
- Using the Partner WSDL

DescribeSObjectResult

The `describeSObjects()` call returns an array of `DescribeSObjectResult` objects. Each object has the following properties:

Name	Type	Description
`activateable`	boolean	Reserved for future use.
`actionOverrides`	ActionOverride[]	An array of action overrides. Action overrides replace the URLs specified in the `urlDetail`, `urlEdit` and `urlNew` fields. This field is available in API version 32.0 and later.
`childRelationships`	ChildRelationship[]	An array of child relationships, which is the name of the sObject that has a foreign key to the sObject being described.
`compactLayoutable`	boolean	Indicates that the object can be used in `describeCompactLayouts()`.
`createable`	boolean	Indicates whether the object can be created via the `create()` call (`true`) or not (`false`).
`custom`	boolean	Indicates whether the object is a custom object (`true`) or not (`false`).
`customSetting`	boolean	Indicates whether the object is a custom setting object (`true`) or not (`false`).

Name	Type	Description
deletable	boolean	Indicates whether the object can be deleted via the delete() call (true) or not (false).
deprecatedAndHidden	boolean	Reserved for future use.
feedEnabled	boolean	Indicates whether Chatter feeds are enabled for the object (true) or not (false). This property is available in API version 19.0 and later.
fields	Field[]	Array of fields associated with the object. The mechanism for retrieving information from this list varies among development tools.
keyPrefix	string	Three-character prefix code in the object ID. Object IDs are prefixed with three-character codes that specify the type of the object. For example, Account objects have a prefix of 001 and Opportunity objects have a prefix of 006. Note that a key prefix can sometimes be shared by multiple objects so it does not always uniquely identify an object. Use the value of this field to determine the object type of a parent in those cases where the child may have more than one object type as parent (polymorphic). For example, you may need to obtain the keyPrefix value for the parent of a Task or Event.
label	string	Label text for a tab or field renamed in the user interface, if applicable, or the object name, if not. For example, an organization representing a medical vertical might rename Account to Patient. Tabs and fields can be renamed in the Salesforce user interface. See the Salesforce online help for more information.
labelPlural	string	Label text for an object that represents the plural version of an object name, for example, "Accounts."
layoutable	boolean	Indicates whether the object supports the describeLayout() call (true) or not (false).
mergeable	boolean	Indicates whether the object can be merged with other objects of its type (true) or not (false). true for leads, contacts, and accounts.
mruEnabled	boolean	Indicates whether Most Recently Used (MRU) list functionality is enabled for the object (true) or not (false).
name	string	Name of the object. This is the same string that was passed in as the sObjectType parameter.
namedLayoutInfos	NamedLayoutInfo[]	The specific named layouts that are available for the objects other than the default layout.
networkScopeFieldName	string	The API name of the networkScopeField that scopes the entity to a community. For most entities, the value of this property is null.
queryable	boolean	Indicates whether the object can be queried via the query() call (true) or not (false).

Name	Type	Description
`recordTypeInfos`	RecordTypeInfo[]	An array of the record types supported by this object. The user need not have access to all the returned record types to see them here.
`replicateable`	boolean	Indicates whether the object can be replicated via the `getUpdated()` and `getDeleted()` calls (`true`) or not (`false`).
`retrieveable`	boolean	Indicates whether the object can be retrieved via the `retrieve()` call (`true`) or not (`false`).
`searchable`	boolean	Indicates whether the object can be searched via the `search()` call (`true`) or not (`false`).
`searchLayoutable`	boolean	Indicates whether search layout information can be retrieved via the `describeSearchLayouts()` call (`true`) or not (`false`).
`supportedScopes`	ScopeInfo	The list of supported scopes for the object. For example, Account might have supported scopes of “All Accounts”, “My Accounts”, and “My Team’s Accounts”.
`triggerable`	boolean	Indicates whether the object supports Apex triggers.
`undeletable`	boolean	Indicates whether an object can be undeleted using the `undelete()` call (`true`) or not (`false`).
`updateable`	boolean	Indicates whether the object can be updated via the `update()` call (`true`) or not (`false`).
`urlDetail`	string	URL to the read-only detail page for this object. Compare with `urlEdit`, which is read-write. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned `urlDetail` values are dynamic. To ensure that client applications are forward compatible, it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.
`urlEdit`	string	URL to the edit page for this object. For example, the `urlEdit` field for the Account object returns `https://`***`yourInstance`***`.salesforce.com/{ID}/e`. Substituting the `{ID}` field for the current object ID will return the edit page for that specific account in the Salesforce user interface. Compare with `urlDetail`, which is read-only. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned `urlDetail` values are dynamic. To ensure that client applications are forward compatible, it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.
`urlNew`	string	URL to the new/create page for this object. Client applications can use this URL to redirect to, or access, the Salesforce user interface for standard and custom objects. To provide flexibility and allow for future enhancements, returned `urlNew` values are dynamic. To ensure that client applications

Name	Type	Description
		are forward compatible, it is recommended that they use this capability where possible. Note that, for objects for which a stable URL is not available, this field is returned empty.

Note: The properties with a Boolean value indicate whether certain API calls can be used for an object. However, other factors, such as permissions, also affect whether such operations can be performed on the object.

ActionOverride

ActionOverride provides details about an action that replaces the default action pages for an object. For example, an object could be configured to replace the new/create page with a custom page. This type is available in API version 32.0 and later.

Name	Type	Description
`formFactor`	string	Represents the environment to which the action override applies. For example, a `Large` value in this field represents the Lightning Experience desktop environment, and is valid for Lightning pages and Lightning components. A `Small` value represents the Salesforce mobile app on a phone or tablet. This field is available in API version 37.0 and later.
`isAvailableInTouch`	boolean	Indicates whether the action override is available in the Salesforce mobile app (`true`) or not (`false`).
`name`	string	The name of the action that overrides the default action. For example, if the new/create page was overridden with a custom action, the name might be "New".
`pageId`	reference	The ID of the page for the action override.
`url`	string	The URL of the item being used for the action override, such as a Visualforce page. Returns as `null` for Lightning page overrides.

ChildRelationship

The name of the sObject that has a foreign key to the sObject being described.

Name	Type	Description
`cascadeDelete`	boolean	Indicates whether the child object is deleted when the parent object is deleted (`true`) or not (`false`).
`childSObject`	string	The name of the object on which there is a foreign key back to the parent sObject.
`deprecatedAndHidden`	boolean	Reserved for future use.
`field`	string	The name of the field that has a foreign key back to the parent sObject.

Name	Type	Description
`relationshipName`	string	The name of the relationship, usually the plural of the value in `childSObject`.

Field

In the DescribeSObjectResult, the `fields` property contains an array of `Field` objects. Each field represents a field in an API object. The array contains only the fields that the user can view, as defined by the user's field-level security settings.

Name	Type	Description
`autonumber`	boolean	Indicates whether this field is an autonumber field (`true`) or not (`false`). Analogous to a SQL `IDENTITY` type, autonumber fields are read only, non-createable text fields with a maximum length of 30 characters. Autonumber fields are read-only fields used to provide a unique ID that is independent of the internal object ID (such as a purchase order number or invoice number). Autonumber fields are configured entirely in the Salesforce user interface. The API provides access to this attribute so that client applications can determine whether a given field is an autonumber field.
`byteLength`	int	For variable-length fields (including binary fields), the maximum size of the field, in bytes.
`calculated`	boolean	Indicates whether the field is a custom formula field (`true`) or not (`false`). Note that custom formula fields are always read-only.
`caseSensitive`	boolean	Indicates whether the field is case sensitive (`true`) or not (`false`).
`controllerName`	string	The name of the field that controls the values of this picklist. It only applies if `type` is `picklist` or `multipicklist` and `dependentPicklist` is true. See About Dependent Picklists. The mapping of controlling field to dependent field is stored in the `validFor` attribute of each `PicklistEntry` for this picklist. See `validFor`.
`createable`	boolean	Indicates whether the field can be created (`true`) or not (`false`). If `true`, then this field value can be set in a `create()` call.
`custom`	boolean	Indicates whether the field is a custom field (`true`) or not (`false`).
`defaultedOnCreate`	boolean	Indicates whether this field is defaulted when created (`true`) or not (`false`). If `true`, then Salesforce implicitly assigns a value for this field when the object is created, even if a value for this field is not passed in on the `create()` call. For example, in the Opportunity object, the `Probability` field has this attribute because its value is derived from the `Stage` field. Similarly, the `Owner` has this attribute on most objects because its value is derived from the current user (if the `Owner` field is not specified).
`defaultValueFormula`	string	The default value specified for this field if the formula is not used. If no value has been specified, this field is not returned.

Name	Type	Description
`dependentPicklist`	boolean	Indicates whether a picklist is a dependent picklist (`true`) where available values depend on the chosen values from a controlling field, or not (`false`). See About Dependent Picklists.
`deprecatedAndHidden`	boolean	Reserved for future use.
`digits`	int	For fields of type integer. Maximum number of digits. The API returns an error if an integer value exceeds the number of digits.
`displayLocationInDecimal`	boolean	Indicates how the geolocation values of a Location custom field appears in the user interface. If `true`, the geolocation values appear in decimal notation. If `false`, the geolocation values appear as degrees, minutes, and seconds.
`encrypted`	boolean	Note: This page is about Shield Platform Encryption, not Classic Encryption. What's the difference? Indicates whether this field is encrypted. This value only appears in the results of a `describeSObjects()` call when it is `true`; otherwise, it is omitted from the results. This field is available in API version 31.0 and later.
`extraTypeInfo`	string	If the field is a `textarea` field type, indicates if the text area is plain text (`plaintextarea`) or rich text (`richtextarea`). If the field is a `url` field type, if this value is `imageurl`, the URL references an image file. Available on standard fields on standard objects only, for example, `Account.photoUrl`, `Contact.photoUrl`, and so on. If the field is a `reference` field type, indicates the type of external object relationship. Available on external objects only. • `null`—lookup relationship • `externallookup`—external lookup relationship • `indirectlookup`—indirect lookup relationship
`filterable`	boolean	Indicates whether the field is filterable (`true`) or not (`false`). If `true`, then this field can be specified in the `WHERE` clause of a query string in a `query()` call.
`filteredLookupInfo`	FilteredLookupInfo	If the field is a `reference` field type with a lookup filter, `filteredLookupInfo` contains the lookup filter information for the field. If there is no lookup filter, or the filter is inactive, this field is `null`. This field is available in API version 31.0 and later.
`formula`	string	The formula specified for this field. If no formula is specified for this field, it is not returned.
`groupable`	boolean	Indicates whether the field can be included in the `GROUP BY` clause of a SOQL query (`true`) or not (`false`). See GROUP BY in the *Salesforce SOQL and SOSL Reference Guide*. Available in API version 18.0 and later.
`highScaleNumber`	boolean	Indicates whether the field stores numbers to 8 decimal places regardless of what's specified in the field details (`true`) or not (`false`). Used to handle currencies

Name	Type	Description
		for products that cost fractions of a cent, in large quantities. If high-scale unit pricing isn't enabled in your organization, this field isn't returned.Available in API version 33.0 and later.
`htmlFormatted`	boolean	Indicates whether a field such as a hyperlink custom formula field has been formatted for HTML and should be encoded for display in HTML (`true`) or not (`false`). Also indicates whether a field is a custom formula field that has an `IMAGE` text function.
`idLookup`	boolean	Indicates whether the field can be used to specify a record in an `upsert()` call (`true`) or not (`false`).
`inlineHelpText`	string	The text that displays in the field-level help hover text for this field. **Note:** This property is not returned unless at least one field on the object contains a value. When at least one field has field-level help, all fields on the object list the property with either the field-level help value or null for fields that have blank field-level help.
`label`	string	Text label that is displayed next to the field in the Salesforce user interface. This label can be localized.
`length`	int	Returns the maximum size of the field in Unicode characters (not bytes) or 40, whichever is less. The maximum value returned by the getLength() property is 40, even if the field's maximum length is greater than 40. For example, the length of the FinancialPackage__Account_Id field is 27, so getLength() returns 27 for this field. However, the length of the FinancialPackage__Account_Revenue_Forecast__c field is 45, so getLength() returns 40 in this case.
`mask`	string	Reserved for future use.
`maskType`	string	Reserved for future use.
`name`	string	Field name used in API calls, such as `create()`, `delete()`, and `query()`.
`nameField`	boolean	Indicates whether this field is a name field (`true`) or not (`false`). Used to identify the name field for standard objects (such as `AccountName` for an Account object) and custom objects. Limited to one per object, except where `FirstName` and `LastName` fields are used (such as in the Contact object). If a compound name is present, for example the `Name` field on a person account, `nameField` is set to `true` for that record. If no compound name is present, `FirstName` and `LastName` have this field set to `true`.
`namePointing`	boolean	Indicates whether the field's value is the Name of the parent of this object (`true`) or not (`false`). Used for objects whose parents may be more than one type of object, for example a task may have an account or a contact as a parent.
`nillable`	boolean	Indicates whether the field is nillable (`true`) or not (`false`). A nillable field can have empty content. A non-nillable field must have a value in order for the object to be created or saved.

Name	Type	Description
permissionable	boolean	Indicates whether FieldPermissions can be specified for the field (true) or not (false).
picklistValues	PicklistEntry[]	Provides the list of valid values for the picklist. Specified only if restrictedPicklist is true.
polymorphicForeignKey	boolean	Indicates whether the foreign key includes multiple entity types (true) or not (false).
precision	int	For fields of type double. Maximum number of digits that can be stored, including all numbers to the left and to the right of the decimal point (but excluding the decimal point character).
relationshipName	string	The name of the relationship, if this is a master-detail relationship field.
relationshipOrder	int	The type of relationship for a master-detail relationship field. Valid values are: • 0 if the field is the primary relationship • 1 if the field is the secondary relationship
referenceTargetField	string	Applies only to indirect lookup relationships on external objects. Name of the custom field on the parent standard or custom object whose values are matched against the values of the child external object's indirect lookup relationship field. This matching is done to determine which records are related to each other. This field is available in API version 32.0 and later.
referenceTo	string[]	For fields that refer to other objects, this array indicates the object types of the referenced objects.
restrictedPicklist	boolean	Indicates whether the field is a restricted picklist (true) or not (false).
scale	int	For fields of type double. Number of digits to the right of the decimal point. The API silently truncates any extra digits to the right of the decimal point, but it returns a fault response if the number has too many digits to the left of the decimal point.
searchPrefilterable	boolean	Indicates whether a foreign key can be included in prefiltering (true) or not (false) when used in a SOSL **WHERE** clause. *Prefiltering* means to filter by a specific field value before executing the full search query. Available in API version 40.0 and later.
soapType	SOAPType	See SOAPType for a list of allowable values.
sortable	boolean	Indicates whether a query can sort on this field (true) or not (false).
type	FieldType	See FieldType for a list of allowable values.
unique	boolean	Indicates whether the value must be unique true) or not false).
updateable	boolean	Indicates one of the following: • Whether the field is updateable, (true) or not (false). If true, then this field value can be set in an update() call.

Name	Type	Description
		• If the field is in a master-detail relationship on a custom object, indicates whether the child records can be reparented to different parent records (`true`), `false` otherwise.
`writeRequiresMasterRead`	boolean	This field only applies to master-detail relationships. Indicates whether a user requires read sharing access (`true`) or write sharing access (`false`) to the parent record to insert, update, and delete a child record. In both cases, a user also needs Create, Edit, and Delete object permissions for the child object.

FieldType

In the `Field` object associated with the DescribeSObjectResult, the `type` field can contain one of the following strings. For more information about field types, see Field Types.

type Field Value	What the Field Object Contains
`string`	String values.
`boolean`	Boolean (`true` / `false`) values.
`int`	Integer values.
`double`	Double values.
`date`	Date values.
`datetime`	Date and time values.
`base64`	Base64-encoded arbitrary binary data (of type base64Binary). Used for Attachment, Document, and Scontrol objects.
`ID`	Primary key field for the object. For information on IDs, see ID Field Type.
`reference`	Cross-references to a different object. Analogous to a foreign key field in SQL.
`currency`	Currency values.
`textarea`	String that is displayed as a multiline text field.
`percent`	Percentage values.
`phone`	Phone numbers. Values can include alphabetic characters. Client applications are responsible for phone number formatting.
`url`	URL values. Client applications should commonly display these as hyperlinks. If `Field.extraTypeInfo` is `imageurl`, the URL references an image, and can be displayed as an image instead.
`email`	Email addresses.
`combobox`	Comboboxes, which provide a set of enumerated values and allow the user to specify a value not in the list.

type Field Value	What the Field Object Contains
`picklist`	Single-select picklists, which provide a set of enumerated values from which only one value can be selected.
`multipicklist`	Multi-select picklists, which provide a set of enumerated values from which multiple values can be selected.
`anyType`	Values can be any of these types: `string`, `picklist`, `boolean`, `int`, `double`, `percent`, `ID`, `date`, `dateTime`, `url`, or `email`.
`location`	Geolocation values, including latitude and longitude, for custom geolocation fields on custom objects.

FilteredLookupInfo

In the `Field` object associated with the DescribeSObjectResult, the `filteredLookupInfo` field contains information about the lookup filter associated with the field.

This subtype is available in API version 31.0 and later.

Name	Type	Description
`controllingFields`	string[]	Array of the field's controlling fields when the lookup filter is dependent on the source object.
`dependent`	boolean	Indicates whether the lookup filter is dependent upon the source object (`true`) or not (`false`).
`optionalFilter`	boolean	Indicates whether the lookup filter is optional (`true`) or not (`false`).

SOAPType

The DescribeSObjectResult returns the `fields` property, which contains an array of fields whose value provides information about the object being described. One of those fields, `soapType`, contains one of the following string values. All of the values preceded by `xsd:` are XML schema primitive data types. For more information about the XML schema primitive data types, see the World Wide Web Consortium's publication *XML Schema Part 2: Data Types* at: `http://www.w3.org/TR/xmlschema-2/`.

Value	Description
`tns:ID`	Unique ID associated with an sObject. For information on IDs, see ID Field Type.
`xsd:anyType`	Can be ID, Boolean, double, integer, string, date, or dateTime.
`xsd:base64Binary`	Base 64-encoded binary data.
`xsd:boolean`	Boolean (`true` / `false`) values.
`xsd:date`	Date values.
`xsd:dateTime`	Date/time values.
`xsd:double`	Double values.

Value	Description
`xsd:int`	Integer values.
`xsd:string`	Character strings.

PicklistEntry

In the `Field` object associated with the DescribeSObjectResult, the `picklistValues` field contains an array of `PicklistEntry` properties. Each `PicklistEntry` can contain any one of the following string values. For more information, see Picklist Field Type.

Name	Type	Description
`active`	boolean	Indicates whether this item must be displayed (`true`) or not (`false`) in the drop-down list for the picklist field in the user interface.
`validFor`	byte[]	A set of bits where each bit indicates a controlling value for which this `PicklistEntry` is valid. See About Dependent Picklists.
`defaultValue`	boolean	Indicates whether this item is the default item (`true`) in the picklist or not (`false`). Only one item in a picklist can be designated as the default.
`label`	string	Display name of this item in the picklist.
`value`	string	Value of this item in the picklist.

About Dependent Picklists

A dependent picklist works in conjunction with a controlling field to filter its values. The value chosen in the controlling field affects the values available in the dependent picklist.

A dependent picklist can be any custom picklist or multi-select picklist field that displays available values based on the value selected in its corresponding controlling field. A controlling field can be any standard or custom picklist (with at least one and less than 200 values) or checkbox field whose values control the available values in one or more corresponding dependent fields.

In the following example, the controlling picklist `Beverage` has two values, which relate to the values of the dependent picklist `Beverage Variety`:

Beverage	Beverage Variety
Coffee	Decaffeinated
	Regular
Tea	Chamomile
	Earl Grey
	English Breakfast

For each `PicklistEntry` that represents a value in a dependent picklist, the `validFor` attribute contains a set of bits. Each bit indicates a controlling field value for which the `PicklistEntry` is valid. Read the bits from left to right.

For more information on dependent picklists, see the "Dependent Picklists" topic in the Salesforce online help.

Sample Java Code for Dependent Picklists

```
public void dependentPicklistSample() {
  // inner class to decode a "validFor" bitset
  class Bitset {
    byte[] data;

    public Bitset(byte[] data) {
      this.data = data == null ? new byte[0] : data;
    }

    public boolean testBit(int n) {
      return (data[n >> 3] & (0x80 >> n % 8)) != 0;
    }

    public int size() {
      return data.length * 8;
    }
  }

  try {
    DescribeSObjectResult describeSObjectResult = connection.describeSObject("Case");
    Field[] fields = describeSObjectResult.getFields();
    // create a map of all fields for later lookup
    Map fieldMap = new HashMap();
    for (int i = 0; i < fields.length; i++) {
      fieldMap.put(fields[i].getName(), fields[i]);
    }
    for (int i = 0; i < fields.length; i++) {
      // check whether this is a dependent picklist
      if (fields[i].getDependentPicklist()) {
        // get the controller by name
        Field controller = (Field)fieldMap.get(fields[i].getControllerName());
        System.out.println("Field '" + fields[i].getLabel() + "' depends on '" +
        controller.getLabel() + "'");
        PicklistEntry[] picklistValues = fields[i].getPicklistValues();
        for (int j = 0; j < picklistValues.length; j++) {
          // for each PicklistEntry: list all controlling values for which it is valid
          System.out.println("Item: '" + picklistValues[j].getLabel() +
          "' is valid for: ");
          Bitset validFor = new Bitset(picklistValues[j].getValidFor());
          if (FieldType.picklist == controller.getType()) {
            // if the controller is a picklist, list all
            // controlling values for which this entry is valid
            for (int k = 0; k < validFor.size(); k++) {
              if (validFor.testBit(k)) {
                // if bit k is set, this entry is valid for the
                // for the controlling entry at index k
                System.out.println(controller.getPicklistValues()[k].getLabel());
              }
            }
          } else if (FieldType._boolean == controller.getType()) {
```

```
            // the controller is a checkbox
            // if bit 1 is set this entry is valid if the controller is checked
            if (validFor.testBit(1)) {
              System.out.println(" checked");
            }
            // if bit 0 is set this entry is valid if the controller is not checked
            if (validFor.testBit(0)) {
              System.out.println(" unchecked");
            }
          }
        }
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

RecordTypeInfo

Base class for the old RecordTypeMapping object. This object contains all of the existing fields of RecordTypeMapping except layoutId and picklistForRecordType.

Name	Type	Description
`available`	boolean	Indicates whether this record type is available (`true`) or not (`false`). Availability is used to display a list of available record types to the user when they are creating a new record.
`defaultRecordTypeMapping`	boolean	Indicates whether this is the default record type mapping (`true`) or not (`false`).
`developerName`	string	Developer name of this record type. Available in API versions 43.0 and later.
`master`	boolean	Indicates whether this is the master record type (`true`) or not (`false`). The master record type is the default record type that's used when a record has no custom record type associated with it.
`name`	string	Name of this record type.
`recordTypeId`	ID	ID of this record type.

NamedLayoutInfo

The name of the named layout for the object. Standard objects can have defined named layouts which are separate from the primary layout for both the profile and the record type. For more information on layout names, see describeLayout().

Name	Type	Description
`name`	string	Name of this layout.

ScopeInfo

A scope for an object that can be used to filter object records. For example, Account may have a supported ScopeInfo of "mine" (with a UI label of "My accounts") which filters only Account records for the current user.

Name	Type	Description
`label`	string	UI label for this scope.
`name`	string	Name of this scope.

`describeSoftphoneLayout()`

Retrieves layout information for a Salesforce CRM Call Center Softphone.

Syntax

```
DescribeSoftphoneLayoutResult[] = connection.describeSoftphoneLayout();
```

Usage

Use this call to obtain information about the layout of a Softphone. Use only in the context of Salesforce CRM Call Center; do not call directly from client programs.

Arguments

This call does not take any objects.

Response

The response is a DescribeSoftphoneLayoutResult object:

Name	Type	Description
`callTypes`	DescribeSoftphoneLayoutCallType[]	A set of attributes associated with each allowed call type. A call type may be Inbound, Outbound, or Internal.
`id`	ID	ID of layout. Note that layout objects are not exposed via the API.
`name`	string	Name of the call type: Inbound, Outbound, or Internal.

DescribeSoftphoneLayoutCallType

Each DescribeSoftphoneLayoutResult object contains one or more call types:

Name	Type	Description
infoFields	DescribeSoftphoneLayoutInfoField[]	A set of information field in the softphone layout.
name	string	Name of the layout.
screenPopOptions	DescribeSoftphoneScreenPopOption[]	Settings in the softphone layout that specify how to display screen pops when the details of calls match or don't match existing records. This field is available in API version 18.0 and later.
screenPopsOpenWithin	string	Setting in the softphone layout that specify whether to display screen pops in a new browser window or tab when the details of calls match or don't match existing records. This field is available in API version 18.0 and later.
sections	DescribeSoftphoneLayoutSection[]	A set of object names and the corresponding item name in the softphone layout. There is one section for each object in a call type.

DescribeSoftphoneLayoutInfoField

An information field in the softphone layout.

Name	Type	Description
name	string	The name of an information field in the softphone layout that does not correspond to a Salesforce object. For example, caller ID may be specified in an information field. Information fields hold static information about the call type.

DescribeSoftphoneLayoutSection

Each call type returned in a DescribeSoftphoneLayoutResult object contains one section for each call type. Each section contains object-item pairs:

Name	Type	Description
entityApiName	string	The name of an object in the Salesforce application that corresponds to an item displayed in the softphone layout, for example, a set of accounts or cases.
items	DescribeSoftphoneLayoutItem[]	A set of softphone layout items.

DescribeSoftphoneLayoutItem

Each layout item corresponds to a record in Salesforce:

Name	Type	Description
itemApiName	string	The name of a record in the Salesforce application that corresponds to an item displayed in the softphone layout, for example, the Acme account.

DescribeSoftphoneScreenPopOption

Each call type returned in a DescribeSoftphoneLayoutResult object contains one `screenPopOptions` field for each call type. Each `screenPopOptions` field contains details about screen pop settings:

Name	Type	Description
matchType	string	Setting on a softphone layout to pop a screen for call details that match a single record, multiple records, or no records.
screenPopData	string	Setting on a softphone layout for a specific object or page to pop for a call's `matchType`. For example, pop a specified Visualforce page when the details of a call match a record.
screenPopType	picklist	Setting that specifies how to pop a screen for a call's `matchType`. For example, pop a detail page or don't pop any page when the details of a call match a record.

Sample Code—Java

This sample describes the soft phone layout and writes its properties to the console. It then gets the allowed call types. For each call type, it gets its information fields, layout sections, and the layout items in the layout sections. It writes these values to the console.

```
public void describeSoftphoneLayout() {
  try {
    DescribeSoftphoneLayoutResult result =
        connection.describeSoftphoneLayout();
    System.out.println("ID of retrieved Softphone layout: " +
        result.getId());
    System.out.println("Name of retrieved Softphone layout: " +
        result.getName());
    System.out.println("\nContains following " +
        "Call Type Layouts\n");
    for (DescribeSoftphoneLayoutCallType type :
          result.getCallTypes()) {
      System.out.println("Layout for " + type.getName() +
          " calls");
      System.out.println("\tCall-related fields:");
      for (DescribeSoftphoneLayoutInfoField field :
            type.getInfoFields()) {
        System.out.println("\t\t{" + field.getName());
      }
      System.out.println("\tDisplayed Objects:");
      for (DescribeSoftphoneLayoutSection section :
            type.getSections()) {
        System.out.println("\t\tFor entity " +
            section.getEntityApiName() +
            " following records are displayed:"
```

```
        );
        for (DescribeSoftphoneLayoutItem item :
              section.getItems()) {
          System.out.println("\t\t\t" + item.getItemApiName());
        }
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

This sample describes the soft phone layout and writes its properties to the console. It then gets the allowed call types. For each call type, it gets its information fields, layout sections, and the layout items in the layout sections. It writes these values to the console.

```
/// Demonstrates how to retrieve the layout information
/// for a Salesforce CRM Call Center Softphone
public void DescribeSoftphoneLayoutSample()
{
   try
   {
       DescribeSoftphoneLayoutResult dsplResult = binding.describeSoftphoneLayout();

       // Display the ID and Name of the layout
       Console.WriteLine("ID of retrieved Softphone layout: {0}", dsplResult.id);
       Console.WriteLine("Name of retrieved Softphone layout: {0}", dsplResult.name);

       // Display the contents of each Call Type
       Console.WriteLine("\nContains following Call Type Layouts\n");
       foreach (DescribeSoftphoneLayoutCallType dsplCallType in dsplResult.callTypes)
       {
           Console.WriteLine("Layout for {0} calls", dsplCallType.name);

           // Display the call-related fields contained in the call type
           Console.WriteLine("\tCall-related fields:");
           foreach (DescribeSoftphoneLayoutInfoField dsplInfoField
               in dsplCallType.infoFields)
           {
            Console.WriteLine("\t\t{0}", dsplInfoField.name);
           }

           // Display the objects that are included in the layout
           Console.WriteLine("\tDisplayed Objects:");
           foreach (DescribeSoftphoneLayoutSection dsplSection
               in dsplCallType.sections)
           {
               Console.WriteLine("\t\tFor entity {0} following records are displayed:",
                   dsplSection.entityApiName);
               foreach (DescribeSoftphoneLayoutItem dsplItem in dsplSection.items)
               {
                   Console.WriteLine("\t\t\t{0}", dsplItem.itemApiName);
```

```
                }
            }
        }
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Message);
        Console.WriteLine(e.StackTrace);
        Console.WriteLine(e.InnerException);
    }
}
```

describeSoqlListViews()

Retrieves the SOQL query and other information about a list view.

Syntax

```
connection.describeSoqlListViews(DescribeSoqlListViewsRequest request);
```

Usage

Use the `describeSoqlListViews()` call to retrieve information about a list view, including the ID, the columns, and the SOQL query. This call is useful if you want to use the SOQL that drives an existing list view in your custom application. This call is available in API version 32.0 and later.

Sample Code—Java

```
public void example() throws Exception {
         DescribeSoqlListViewsRequest request =
createDescribeSoqlListViewsRequest(listViewId, null);
         this.getClient().describeSoqlListViews(request);
      }
```

Arguments

Name	Type	Description
`request`	DescribeSoqlListViewsRequest	The fully qualified name or the ID of the list view and the object with which the list view is associated.

Response

A `DescribeSoqlListViewResult` object that contains one or more `DescribeSoqlListView` on page 2842 objects.

Faults

InvalidSObjectFault

UnexpectedErrorFault

DescribeSoqlListView

Contains information about the specified list view, including the columns, sObject type, and SOQL query.

The `DescribeSoqlListView` object has the following properties:

Name	Type	Description
`columns`	ListViewColumn[]	The columns that are returned by the list view query.
`id`	ID	The list view's fully qualified ID.
`orderBy`	ListViewOrderBy[]	A list of fields to sort results by, the sort order, and the position to which null values should be sorted.
`query`	string	The fully composed SOQL query for the list view.
`scope`	string	A `filterScope` to use for limiting the results.
`sobjectType`	string	The object with which the list view is associated.
`whereCondition`	SoqlWhereCondition	Filter conditions on the list view. Filter conditions provide an additional level of control over which records get shown in the list view.

DescribeSoqlListViewParams

Use the `DescribeSoqlListViewParams` object with `describeSoqlListViews()` to retrieve the SOQL from a list view.

The `DescribeSoqlListViewParams` object has the following properties:

Name	Type	Description
`developerNameOrId`	string	The list view's ID or fully qualified developer name.
`sobjectType`	string	The API name of the sObject for the list view.

DescribeSoqlListViewResult

Contains one or more `DescribeSoqlListView` objects, each of which contains information about one or more list views, including the ID, sObject type, columns, and SOQL query of each.

The `DescribeSoqlListViewResult` object has the following properties:

Name	Type	Description
`describeSoqlListViews`	DescribeSoqlListView[]	Information about one or more list views, including the ID, sObject type, columns, and SOQL query of each.

DescribeSoqlListViewsRequest

Use the `DescribeSoqlListViewsRequest` object with `describeSoqlListViews()` to retrieve information about a list view.

The `DescribeSoqlListViewsRequest` object has the following properties:

Name	Type	Description
`listViewParams`	DescribeSoqlListViewParams[]	A list of parameters that specify the list view to describe.

EDITIONS

Available in: Salesforce Classic

Available in:

ListViewColumn

Contains metadata about a single list view column.

The `ListViewColumn` object is returned by the `describeSoqlListViews()` and `executeListView()` calls. It has the following properties:

Name	Type	Description
`ascendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "A-Z" for a text field, or "Low to High" for a numeric field. Set to null if the column isn't sortable.
`descendingLabel`	string	The localized type-specific label for sorting the column in ascending order. For example: "Z-A" for a text field, or "High to Low" for a numeric field. Set to null if the column is not sortable.
`fieldNameOrPath`	string	The field name or SOQL field path for the column.
`hidden`	boolean	If true, specifies that the column is not displayed, and is present only to support the display of other columns or other client-side logic.
`label`	string	The localized display label for the column.
`selectListItem`	string	The SOQL SELECT item for the column. The item might differ from the field name or path, due to display formatting (for example, toLabel for picklists).
`sortDirection`	orderByDirection	An enumerated value, one of the following if the column is sortable: • ascending • descending Set to null if the column is not sortable.
`sortIndex`	int	The zero-based index that indicates the column's position within a multilevel sort, or null if the records are not sorted by the column.
`sortable`	boolean	Whether the column is sortable, in which case it might be referenced in the ExecuteListView orderBy parameter.
`type`	FieldType	The column data type.

ListViewOrderBy

Use the `ListViewOrderBy` object with `executeListView()` to determine the order in which records are returned from a list view.

The `ListViewOrderBy` object is returned by the `describeSoqlListViews()` call, is an optional input to the `executeListView()` call, and has the following properties:

Name	Type	Description
`fieldNameOrPath`	string	The field name or SOQL path of the field on which to sort the records.
`nullsPosition`	orderByNullsPosition	An enumerated value that determines where nulls are sorted in the results: • first • last
`sortDirection`	orderByDirection	An enumerated value that determines the sort order of the results: • ascending • descending

SoqlWhereCondition

Contains information about SOQL filter conditions for a list view.

Each condition listed in SoqlWhereCondition represents a condition expression in a SOQL WHERE clause that compares a field value to a comparison value using a condition operator. Each condition contains the following properties.

Name	Type	Description
`field`	string	The object field used by the filter condition.
`operator`	soqlOperator	The filter operation. Operations include: • equals—Condition is true if the field value equals the specified value. String comparisons using the equals operator are case sensitive for unique case-sensitive fields and case insensitive for all other fields. • excludes—Condition is true for multi-select picklist fields if the selected field values are not in the list of condition values. • greaterThan—Condition is true if the field value is greater than the specified value. • greaterThenOrEqualTo—Condition is true if the field value is greater than or equal to the specified value. • in—Condition is true if the field value equals any specified value in the values list. • includes—Condition is true for multi-select picklist fields if the selected field values are in the list of condition values. • lessThan—Condition is true if the field value is less than the specified value.

Name	Type	Description
		• lessThanOrEqualTo—Condition is true if the field value is less than or equal to the specified value. • like—Condition is true if the field value matches the specified value, using character matching logic described in Comparison Operators in the *SOQL and SOSL Reference*. • notEquals—Condition is true if the field value doesn't equal the specified value. • notIn—Condition is true if the field value doesn't equal any specified value in the values list. • notLike—Condition is true if the field value doesn't match the specified value using the character matching logic described in Comparison Operators in the *SOQL and SOSL Reference*. Available in API version 41.0 and later. • within—Condition is true if the field value location is within the value distance using a location-based comparison. For more information, see Location-Based SOQL Queries in the *SOQL and SOSL Reference*.
`values`	string[]	A list of one or more values used to compare with the field value using the `operator` comparison logic.

Evaluating SoqlWhereConditions

In the SOAP API, Salesforce uses subclasses of SoqlWhereCondition to represent different categories of conditions. Use your development language's type comparison functionality (such as Java's `instanceof` operator) to determine which subclass is used for a particular instance of SoqlWhereCondition.

The SoqlConditionGroup subclass represents a group of SOQL WHERE clause conditions and uses the following properties.

Name	Type	Description
`conditions`	condition[]	List of filter conditions. If the list view uses filter logic, each logical filter group is represented with a conditions list.
`conjunction`	soqlConjunction	A conjunction operation that describes the filter logic to use for multiple conditions in a logical filter group. Values include: • and—All conditions must be true for the overall SoqlWhereCondition. • or—One of the conditions must be true for the overall SoqlWhereCondition.

The SoqlNotCondition subclass represents a special use of the `like` operator. In API version 40.0 and earlier, when evaluating a SoqlWhereCondition that was created using a `not like` operator (displayed as **does not contain** in the UI), the operator value in the condition is `like`. Salesforce also uses the SoqlNotCondition subclass of SoqlWhereCondition to represent the complete condition. The following example uses Java's `instanceof` operator to determine whether a `not like` operation is specified.

```
if (resultSoqlWhereCondition instanceof SoqlNotCondition) {
  // condition is really NOT condition
  // if operator is "like", this condition really means "not like"
  ...
}
```

In API version 41.0 and later, the `notLike` operator is used instead of SoqlNotCondition and a `like` operator. The `notLike` operator is available only for list views. You can't use it in SOQL queries used in other Salesforce features.

describeTabs()

Returns information about the standard and custom apps available to the logged-in user, as listed in the Lightning Platform app menu at the top of the page. An app is a set of tabs that works as a unit to provide application functionality. For example, two of the standard Salesforce apps are "Sales" and "Service."

Syntax

```
describeTabSetResult []  = connection.describeTabs();
```

Usage

Use the `describeTabs()` call to obtain information about the standard and custom apps to which the logged-in user has access. The `describeTabs()` call returns the minimum required metadata that can be used to render apps in another user interface. Typically this call is used by partner applications to render Salesforce data in another user interface.

For each app, the call returns the app name, the URL of the logo, whether or not it's the currently selected application for the user, and details about the tabs included in that app.

> **Important:** The `describeTabs()` call returns information only about tabs that display in the Salesforce user interface for the logged-in user. If a user clicks the All Tabs (+) tab and hides some tabs from his Salesforce user interface, those user-hidden tabs aren't included in the set of tabs returned by `describeTabs()`.
>
> Use the `describeAllTabs()` call to obtain information about all the tabs that are available to the logged-in user.

For each tab, the call returns the tab name, the primary sObject that's displayed on the tab, whether it's a custom tab, and the URL for viewing that tab. Note that the "All Tabs" tab and Lightning page tabs aren't included in the list of tabs.

Sample Code—Java

This sample calls `describeTabs()`, which returns an array of tab set results. Next, for each tab set result, which represents an app, it retrieves some of its properties and gets all the tabs for this app. It writes all retrieved properties to the console.

```
public void describeTabsSample() {
  try {
    // Describe tabs
    DescribeTabSetResult[] dtsrs = connection.describeTabs();
    System.out.println("There are " + dtsrs.length +
        " tab sets defined.");
```

```
    // For each tab set describe result, get some properties
    for (int i = 0; i < dtsrs.length; i++) {
      System.out.println("Tab Set " + (i + 1) + ":");
      DescribeTabSetResult dtsr = dtsrs[i];
      System.out.println("Label: " + dtsr.getLabel());
      System.out.println("\tLogo URL: " + dtsr.getLogoUrl());
      System.out.println("\tTab selected: " +
          dtsr.isSelected());

      // Describe the tabs for the tab set
      DescribeTab[] tabs = dtsr.getTabs();
      System.out.println("\tTabs defined: " + tabs.length);

      // Iterate through the returned tabs
      for (int j = 0; j < tabs.length; j++) {
        DescribeTab tab = tabs[j];
        System.out.println("\tTab " + (j + 1) + ":");
        System.out.println("\t\tName: " +
            tab.getSobjectName());
        System.out.println("\t\tLabel: " + tab.getLabel());
        System.out.println("\t\tURL: " + tab.getUrl());
        DescribeColor[] tabColors = tab.getColors();
        // Iterate through tab colors as needed
        DescribeIcon[] tabIcons = tab.getIcons();
        // Iterate through tab icons as needed
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

Sample Code—C#

This sample calls `describeTabs()`, which returns an array of tab set results. Next, for each tab set result, which represents an app, it retrieves some of its properties and gets all the tabs for this app. It writes all retrieved properties to the console.

```
public void describeTabsSample() {
    try {
      // Describe tabs
      DescribeTabSetResult[] dtsrs = binding.describeTabs();
      Console.WriteLine("There are " + dtsrs.Length +
          " tab sets defined.");

      // For each tab set describe result, get some properties
      for (int i = 0; i < dtsrs.Length; i++) {
          Console.WriteLine("Tab Set " + (i + 1) + ":");
          DescribeTabSetResult dtsr = dtsrs[i];
          Console.WriteLine("Label: " + dtsr.label);
          Console.WriteLine("\tLogo URL: " + dtsr.logoUrl);
          Console.WriteLine("\tTab selected: " +
              dtsr.selected);
```

```
            // Describe the tabs for the tab set
            DescribeTab[] tabs = dtsr.tabs;
            Console.WriteLine("\tTabs defined: " + tabs.Length);

            // Iterate through the returned tabs
            for (int j = 0; j < tabs.Length; j++) {
                DescribeTab tab = tabs[j];
                Console.WriteLine("\tTab " + (j + 1) + ":");
                Console.WriteLine("\t\tName: " +
                    tab.sobjectName);
                Console.WriteLine("\t\tLabel: " + tab.label);
                Console.WriteLine("\t\tURL: " + tab.url);
                DescribeColor[] tabColors = tab.colors;
                // Iterate through tab colors as needed
                DescribeIcon[] tabIcons = tab.icons;
                // Iterate through tab icons as needed
            }
        }
    } catch (SoapException e) {
        Console.WriteLine("An unexpected error has occurred: " +
                    e.Message + "\n" + e.StackTrace);
    }
}
```

Arguments

None.

Response

describeTabSetResult, DescribeTab

SEE ALSO:

- API Call Basics
- Using the Partner WSDL
- DescribeTab
- describeTabSetResult

describeTabSetResult

The `describeTabs()` call returns an array of `DescribeTabSetResult` objects, which has the following properties:

Name	Type	Description
`description`	string	The description for this standard or custom app.
`label`	string	The display label for this standard or custom app. This value changes when tabs are renamed in the Salesforce user interface. See the Salesforce online help for more information.

Name	Type	Description
logoUrl	string	A fully qualified URL to the logo image associated with the standard or custom app.
namespace	string	If this is a custom app, and a set of tabs in the custom app was installed as part of a managed package, the value of this attribute is the developer namespace prefix that the creator of the package chose when the Developer Edition organization was enabled to allow publishing a managed package. This attribute identifies elements of a Salesforce AppExchange package.
selected	boolean	If `true`, then this standard or custom app is the user's currently selected app.
tabs	DescribeTab	An array of tabs that are displayed for the specified standard app or custom app.

DescribeColor

DescribeColor contains color metadata information for a tab. The `describeTabs()` call returns an array of DescribeTabSetResult values. Each DescribeTabSetResult contains an array of DescribeTab values, and each DescribeTab contains an array of DescribeColor values.

Each DescribeColor is associated with a Salesforce user interface theme. For more information on themes, see Identifying the Salesforce Style Your Users See in the Visualforce Developer's Guide.

Color information can also be retrieved via the `describeTheme()` and `describeGlobalTheme()` calls. These calls return information on colors used for each object in your organization that can use theme icons and colors.

Name	Type	Description
color	string	The color described in web color RGB format—for example, "00FF00".
context	string	The color context, which determines whether the color is the main color (or primary) for the tab.
theme	string	The associated theme. Possible values include: • *theme2*—Theme used prior to Spring '10, called the "Salesforce Classic 2005 user interface theme" • *theme3*—Theme introduced in Spring '10, called the "Salesforce Classic 2010 user interface theme" • *theme4*—Theme introduced in Winter '14 for the mobile touchscreen version of Salesforce, and in Winter '16 for Lightning Experience • *custom*—Theme associated with a custom icon

DescribeIcon

DescribeIcon contains icon metadata information for a tab. The `describeTabs()` call returns an array of DescribeTabSetResult values. Each DescribeTabSetResult contains an array of DescribeTab values, and each DescribeTab contains an array of DescribeIcon values.

Icon information can also be retrieved via the `describeTheme()` and `describeGlobalTheme()` calls. These calls return information on icons used for each object in your organization that can use theme icons and colors.

Name	Type	Description
contentType	string	The tab icon's content type, for example, "image/png."
height	int	The tab icon's height in pixels. If the icon content type is an SVG type, height and width values are not used.
theme	string	The associated theme. Possible values include: • *theme2*—Theme used prior to Spring '10, called the "Salesforce Classic 2005 user interface theme" • *theme3*—Theme introduced in Spring '10, called the "Salesforce Classic 2010 user interface theme" • *theme4*—Theme introduced in Winter '14 for the mobile touchscreen version of Salesforce, and in Winter '16 for Lightning Experience • *custom*—Theme associated with a custom icon
url	string	The fully qualified URL for this icon.
width	int	The tab icon's width in pixels. If the icon content type is an SVG type, height and width values are not used.

DescribeTab

The `describeTabs()` call returns a describeTabSetResult object, of which DescribeTab is a property:

Name	Type	Description
colors	DescribeColor[]	Array of color information used for a tab. This field is available in API version 29.0 and later.
custom	boolean	`true` if this is a custom tab, `false` if this is a standard tab.
iconUrl	string	The URL for the main 32x32 pixel icon for a tab. This icon appears next to the heading at the top of most pages. This icon URL corresponds to the 32x32 icon used for the Salesforce Classic 2010 user interface theme.
icons	DescribeIcon[]	Array of icon information used for a tab. This field is available in API version 29.0 and later.
label	string	The display label for this tab.
miniIconUrl	string	The URL for the 16x16 pixel icon that represents a tab. This icon appears in related lists and other locations. This icon URL corresponds to the 16x16 icon used for the current Salesforce theme, introduced in Spring '10.
name	string	The API name of the tab.
sobjectName	string	The name of the sObject that is primarily displayed on this tab (for tabs that display a particular SObject). For a list of objects, see Standard Objects.

Name	Type	Description
url	string	A fully qualified URL for viewing this tab.

SEE ALSO:

DescribeColor

DescribeIcon

describeTheme()

Returns information about themes available to the current logged-in user.

Syntax

```
DescribeThemeResult = connection.describeTheme(string sObjectType[]);
```

Usage

Use `describeTheme()` to get current theme information for a given array of objects. Theme information consists of colors and icons for an object in Salesforce, used for a particular theme. For example, the Merchandise__c object might use the “computer32” icon and a primary tab color of red for the regular Salesforce application theme, and a different set of colors and icons for the mobile touchscreen version of Salesforce.

If you pass `null` instead of an array of objects, `describeTheme()` returns theme information for all objects in your organization that use theme colors and icons.

Your client application must be logged in with sufficient access rights to retrieve theme information about your organization’s data. For more information, see Factors that Affect Data Access.

`describeTheme()` is available in API version 29.0 and later.

Sample

This Java sample calls `describeTheme()` to retrieve theme information for Account and Contact, and then iterates over the retrieved theme information.

```
public static void describeThemeExample() {
    try {
        // Get current themes
        DescribeTheme themeResult = connection.describeTheme(
                                                new String[] { "Account", "Contact" });
        DescribeThemeItem[] themeItems = themeResult.getThemeItems();
        for (int i = 0; i < themeItems.length; i++) {
            DescribeThemeItem themeItem = themeItems[i];
            System.out.println("Theme information for object " + themeItem.getName());
            // Get color and icon info for each themeItem
            DescribeColor colors[] = themeItem.getColors();
            System.out.println("    Number of colors: " + colors.length);
            int k;
```

```
            for (k = 0; k < colors.length; k++) {
                DescribeColor color = colors[k];
                System.out.println("    For Color #" + k + ":");
                System.out.println("      Web RGB Color: " + color.getColor());
                System.out.println("      Context: " + color.getContext());
                System.out.println("      Theme: " + color.getTheme());
            }
            DescribeIcon icons[] = themeItem.getIcons();
            System.out.println("    Number of icons: " + icons.length);
            for (k = 0; k < icons.length; k++) {
                DescribeIcon icon = icons[k];
                System.out.println("    For Icon #" + k + ":");
                System.out.println("      ContentType: " + icon.getContentType());
                System.out.println("      Height: " + icon.getHeight());
                System.out.println("      Theme: " + icon.getTheme());
                System.out.println("      URL: " + icon.getUrl());
                System.out.println("      Width: " + icon.getWidth());
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

Response

DescribeThemeResult

Faults

`UnexpectedErrorFault`

SEE ALSO:

- DescribeThemeResult
- DescribeThemeItem
- DescribeColor
- DescribeIcon

DescribeThemeResult

The `describeTheme()` and `describeGlobalTheme()` calls return DescribeThemeResult, which contains an array of DescribeThemeItem values.

Name	Type	Description
`themes`	DescribeThemeItem[]	Array of themes. Theme information is provided for each object in the organization that can use theme icons and colors.

DescribeThemeItem

The `describeTheme()` and `describeGlobalTheme()` calls return DescribeThemeResult, which contains an array of DescribeThemeItem values. Each DescribeThemeItem contains an array of colors and icons used for themes, and the name of the object the theme information applies to.

Name	Type	Description
`colors`	DescribeColor[]	Array of colors.
`icons`	DescribeIcon[]	Array of icons.
`name`	string	Name of the object that the theme colors and icons are associated with.

CHAPTER 11 Utility Calls

This topic describes API calls that your client applications can invoke to obtain the system timestamp, user information, and change user passwords.

Note: For a list of general API calls, see Core Calls. For a list of describe calls, see Describe Calls.

The following table lists the API utility calls described in this topic:

Task / Call	Description
`getServerTimestamp()`	Retrieves the current system timestamp from the API.
`changeOwnPassword()`	Allows users to change their own passwords.
`getUserInfo()`	Retrieves personal information for the user associated with the current session.
`match()`	Evaluates sObjects provided as an input for matches among Leads, using the matching rule specified in the input MatchOptions. This call can be used only with the Standard Matching Rule for Leads on Accounts.
`renderEmailTemplate()`	Replaces merge fields in text bodies of email templates with values from Salesforce records, even for polymorphic fields. The email template bodies and their corresponding `whoId` and `whatId` values are specified in the argument.
`resetPassword()`	Changes a user's password to a system-generated value.
`sendEmail()`	Immediately sends an email message.
`sendEmailMessage()`	Immediately sends up to 10 draft email messages.
`setPassword()`	Sets the specified user's password to the specified value.

Samples

The samples in this section are based on the enterprise WSDL file. They assume that you have already imported the WSDL file and created a connection. To learn how to do so, see the Quick Start tutorial.

changeOwnPassword()

Allows users to change their passwords from old values to new values that they specify.

Syntax

```
ChangeOwnPasswordResult changeOwnPasswordResult = connection.changeOwnPassword(string
oldPassword, string newPassword);
```

Usage

Use `changeOwnPassword()` to allow users to change their passwords to values that they specify. For example, a client application prompts a user to specify a different password, and then invokes `changeOwnPassword()` to change the user's password. Use `setPassword()` if you want to set a different user's password to a value you specify. Use `resetPassword()` if you want to reset a target user's password with a random value generated by the API.

Sample Code—Java

This sample accepts old password and new password parameters, which it uses in the `changeOwnPassword()` call to set the new password of the user.

```
public void doChangeOwnPassword(String oldPasswd, String newPasswd) {
   try {
      ChangeOwnPasswordResult result = connection.changeOwnPassword(oldPasswd, newPasswd);

      System.out.println("Your password was changed to "
            + newPasswd);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts old password and new password parameters, which it uses in the `changeOwnPassword()` call to set the new password of the user.

```
public void doChangeOwnPassword(String oldPasswd, String newPasswd)
{
   try
   {
      ChangeOwnPasswordResult result = binding.changeOwnPassword(oldPasswd, newPasswd);
      Console.WriteLine("Your password was changed to "
            + newPasswd);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`oldPassword`	string	The user's previous password that is being replaced.
`newPassword`	string	The user's new password.

Response

ChangeOwnPasswordResult

Fault

`InvalidOldPasswordFault`

`InvalidNewPasswordFault`

`UnexpectedErrorFault`

SEE ALSO:

resetPassword()

Utility Calls

setPassword()

`getServerTimestamp()`

Retrieves the current system timestamp (Coordinated Universal Time (UTC) time zone) from the API.

Syntax

```
GetServerTimestampResult timestamp = connection.getServerTimestamp();
```

Usage

Use `getServerTimestamp()` to obtain the current system timestamp from the API. You might do this if, for example, you need to use the exact timestamp for timing or data synchronization purposes. When you `create()` or `update()` an object, the API uses the system timestamp to update the `CreatedDate` and `LastModifiedDate` fields, respectively, in the object.

The `getServerTimestamp()` call always returns the timestamp in Coordinated Universal Time (UTC) time zone. However, your local system might automatically display the results in your local time based on your time zone settings.

Note: Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time zone. To determine how your development tool handles time values, refer to its documentation.

Sample Code—Java

This sample gets the server time and writes it to the console in the user's local time zone.

```
public void doGetServerTimestamp() {
   try {
      GetServerTimestampResult result = connection.getServerTimestamp();
      Calendar serverTime = result.getTimestamp();
      System.out.println("Server time is: "
            + serverTime.getTime().toString());
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample gets the server time and writes it to the console in the user's local time zone.

```
public void doGetServerTimestamp()
{
   try
   {
      GetServerTimestampResult result =
            binding.getServerTimestamp();
      DateTime serverTime = result.timestamp;
      Console.WriteLine("Server time is: " +
            serverTime.ToLocalTime().ToString());
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

None.

Response

getServerTimestampResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

Utility Calls

getServerTimestampResult

The getServerTimestamp() call returns a GetServerTimestampResult object, which has the following properties:

Name	Type	Description
timestamp	dateTime	System timestamp of the API when the getServerTimestamp() call was executed.

getUserInfo()

Retrieves personal information for the user associated with the current session.

Syntax

```
getUserInfoResult result = connection.getUserInfo();
```

Usage

Use getUserInfo() to obtain personal information about the currently logged-in user. This convenience API call retrieves and aggregates common profile information that your client application can use for display purposes, performing currency calculations, and so on.

The getUserInfo() call applies only to the username under which your client application has logged in. To retrieve additional personal information not found in the getUserInfoResult object, you can call retrieve() on the User object and pass in the userID returned by this call. To retrieve personal information about other users, you could call retrieve() (if you know their user ID) or query() on the User object.

Sample Code—Java

This sample calls getUserInfo() and writes information about the current user to the console.

```
public void doGetUserInfo() {
   try {
      GetUserInfoResult result = connection.getUserInfo();
      System.out.println("\nUser Information");
      System.out.println("\tFull name: " + result.getUserFullName());
      System.out.println("\tEmail: " + result.getUserEmail());
      System.out.println("\tLocale: " + result.getUserLocale());
      System.out.println("\tTimezone: " + result.getUserTimeZone());
      System.out.println("\tCurrency symbol: " + result.getCurrencySymbol());
      System.out.println("\tOrganization is multi-currency: " +
            result.isOrganizationMultiCurrency());
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample calls `getUserInfo()` and writes information about the current user to the console.

```
public void doGetUserInfo()
{
   try
   {
      GetUserInfoResult result = binding.getUserInfo();
      Console.WriteLine("\nUser Information");
      Console.WriteLine("\tFull name: " + result.userFullName);
      Console.WriteLine("\tEmail: " + result.userEmail);
      Console.WriteLine("\tLocale: " + result.userLocale);
      Console.WriteLine("\tTimezone: " + result.userTimeZone);
      Console.WriteLine("\tCurrency symbol: " + result.currencySymbol);
      Console.WriteLine("\tOrganization is multi-currency: " +
            result.organizationMultiCurrency);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

None.

Response

getUserInfoResult

Fault

`UnexpectedErrorFault`

SEE ALSO:

Utility Calls

getUserInfoResult

The `getUserInfo()` call returns a `GetUserInfoResult` object.

Name	Type	Description
`accessibilityMode`	boolean	Available in API version 7.0 and later. Indicates whether user interface modifications for the visually impaired are on (`true`) or off (`false`). The modifications facilitate the use of screen readers such as JAWS.

Name	Type	Description
chatterExternal	boolean	Type of user license assigned to the Profile associated with the user. Indicates whether a user is part of the org or external. Available in API 40.0 and later.
currencySymbol	string	Currency symbol to use for displaying currency values. Applicable only when `organizationMultiCurrency` is `false`.
organizationId	ID	ID of the organization. Allows third-party tools to uniquely identify individual organizations in Salesforce, which is useful for retrieving billing or organization-wide setup information.
organizationMultiCurrency	boolean	Indicates whether the user's organization uses multiple currencies (`true`) or not (`false`).
organizationName	string	Name of the user's organization or company.
orgDefaultCurrencyIsoCode	string	Default currency ISO code. Applicable only when `organizationMultiCurrency` is `false`. When the logged-in user creates any objects that have a currency ISO code, the API uses this currency ISO code if it is not explicitly specified in the `create()` call.
profileID	ID	ID of the profile associated with the role currently assigned to the user.
roleID	ID	Role ID of the role currently assigned to the user.
sessionSecondsValid	int	The number of seconds before the session expires, starting from the last update time. Available in API version 21.0 and later.
userDefaultCurrencyIsoCode	string	Default currency ISO code. Applicable only when `organizationMultiCurrency` is `true`. When the logged-in user creates any objects that have a currency ISO code, the API uses this currency ISO code if it is not explicitly specified in the `create()` call.
userEmail	string	User's email address.
userFullName	string	User's full name.
userID	ID	User ID.
userLanguage	string	User's language, which controls the language for labels displayed in an application. String is 2-5 characters long. The first two characters are always an ISO language code, for example "fr" or "en." If the value is further qualified by country, then the string also has an underscore (_) and another ISO country code, for example "US" or "UK. For example, the string for the United States is "en_US", and the string for French Canadian is "fr_CA." For a list of the languages that Salesforce supports, see the Salesforce online help topic "What languages does Salesforce support?"
userLocale	string	User's locale, which controls the formatting of dates and choice of symbols for currency. The first two characters are always an ISO language code, for example "fr" or "en." If the value is further qualified by country, then the string also has

Name	Type	Description
		an underscore (_) and another ISO country code, for example “US” or “UK. For example, the string for the United States is “en_US”, and the string for French Canadian is “fr_CA.”
`userName`	string	User’s login name.
`userTimeZone`	string	User’s time zone.
`userType`	string	Type of user license assigned to the Profile associated with the user.
`userUiSkin`	string	Available in API version 7.0 and later. Possible values are: • `theme3`—If the user is using the Salesforce Classic 2010 user interface theme, also known as the *Aloha* interface • `theme2`—If the user is using the Salesforce Classic 2005 user interface theme • `theme1`—If the user is using the oldest user interface theme (obsolete) In the online app, this look and feel setting is configurable from Setup by entering *`User Interface`* in the `Quick Find` box, then selecting **User Interface**. See User Interface Themes.

match()

Evaluates sObjects provided as an input for matches among Leads, using the matching rule specified in the input MatchOptions. This call can be used only with the Standard Matching Rule for Leads on Accounts.

This operation is available in API versions 42.0 and later, in **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions with **Pardot Pro** or **Pardot Ultimate** Edition.

Syntax

```
MatchResult[] callResults = connection.match(SObject[] inputSObjectArray, MatchOptions
   matchOptions);
```

Arguments

Name	Type	Description
inputSObjectArray	Array of sObject	A list of sObjects to evaluate for matches.
matchOptions	MatchOptions	Options, such as the match rule, used during the match operation.

Response

MatchResult

MatchOptions

Represents a type to be used with a match operation. It describes options to be used during the match operation. This type can be used only with the Standard Matching Rule for Leads on Accounts.

This type is available in API versions 42.0 and later, in **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions with **Pardot Pro** or **Pardot Ultimate** Edition.

Fields

Field	Details	[illegible]
`Fields`	string	[illegible]
`MatchEngine`	string	[illegible]
`Rule`	string	[illegible]

Field	Details	[illegible]
		[illegible]
`SobjectType`	string	[illegible]

renderEmailTemplate()

Replaces merge fields in text bodies of email templates with values from Salesforce records, even for polymorphic fields. The email template bodies and their corresponding `whoId` and `whatId` values are specified in the argument.

Syntax

```
RenderEmailTemplateResult = connection.renderEmailTemplate(RenderEmailTemplateRequest[]
renderRequests);
```

Usage

The `renderEmailTemplate()` call is equivalent to rendering merge fields when sending an email with a custom template through the sendEmail() call.

The `renderEmailTemplate()` call can take up to 10 RenderEmailTemplateRequest elements in its array argument, and each RenderEmailTemplateRequest can contain up to 10 template bodies. Each request is independent from the other requests in the array—an error in one request doesn't affect the other requests. Similarly, an error in one template body doesn't cause an error in other text bodies within the same request.

The `renderEmailTemplate()` call substitutes a merge field with the value of either the `whatId` or `whoId` in RenderEmailTemplateRequest:

- If the merge field references a non-human object, it's replaced with the corresponding value of `whatId`. For example, if a merge field references an account or opportunity, the `whatId` value is substituted.
- If the merge field references a human object, it's replaced with the corresponding value of `whoId`. For example, if a merge field references a contact, lead, or user, the `whoId` value is substituted.

The `whatId` and `whoId` field values of RenderEmailTemplateRequest are validated for each request. If the `whatId` doesn't reference a valid what ID (a non-human object), or the `whoId` doesn't reference a valid who ID (a human object), an error is set for the request.

If no value is found for a merge field, the `renderEmailTemplate()` call returns an error for the corresponding template body. For example, if a merge field is replaced with a blank or `null`, an error is returned.

Sample Code—Java

In this sample, the `renderEmailTemplate()` call substitutes all contact merge fields with the value from the specified *`whoId`* argument. Similarly, the call substitutes the opportunity merge field (`{!Opportunity.Name}`) with the specified *`whatId`* value. The second template body in this sample has an incorrect merge field (`{!Contact.SNARF}`), which causes an error on the second template. However, the entire template rendering request is successful.

```
public void renderTemplates(String whoId, String whatId)
        throws ConnectionException, RemoteException, MalformedURLException {
    // Array of three template bodies.
    // The second template body generates an error.
    final String[] TEMPLATE_BODIES = new String[] {
           "This is a good template body {!Contact.Name}",
           "This is a bad template body {!Opportunity.Name} {!Contact.SNARF} ",
           "This is another good template body {!Contact.Name}"};

    // Create request and add template bodies, whatId, and whoId.
    RenderEmailTemplateRequest req = new RenderEmailTemplateRequest();
    req.setTemplateBodies(TEMPLATE_BODIES);
    req.setWhatId(whatId);
    req.setWhoId(whoId);
    // An array of results is returned, one for each request.
    // We only have one request.
    RenderEmailTemplateResult[] results =  connection.renderEmailTemplate(
            new RenderEmailTemplateRequest[] { req });
    if (results != null) {
        // Check results for our one and only request.
        // Check request was processed successfully, and if not, print the errors.
        if (!results[0].isSuccess()) {
            System.out.println(
            "The following errors were encountered while rendering email templates:");
            for (Error err : results[0].getErrors()) {
                System.out.println(err.getMessage());
            }
        } else {
            // Check results for each body template and print merged body
            RenderEmailTemplateBodyResult[] bodyResults = results[0].getBodyResults();
            for( Integer i=0;i<bodyResults.length;i++) {
                RenderEmailTemplateBodyResult result = bodyResults[i];
                if (result.isSuccess()) {
                    System.out.println("\nMerged body: \n" + result.getMergedBody());
                } else {
                    System.out.println("\nErrors were found for body[" + i + "]: ");
                    for (RenderEmailTemplateError err : result.getErrors()) {
                        System.out.println(err.getMessage() + " - Field name: "
                            + err.getFieldName());
                    }
                }
            }
        }
```

```
    }
}
```

Let's say you run this sample by specifying a valid contact ID for the first argument (*whoId*) and `null` for the second argument (*whatId*). The second template has two errors set. The first error is for the incorrect merge field, and the second error is because the opportunity merge field (`{!Opportunity.Name}`) wasn't found due to the null *whatId*. The response looks like the following.

```
Merged body:
This is a good template body Howard Jones

Errors were found for body[1]:
Field Contact.SNARF does not exist. Check spelling. - Field name: Contact.SNARF
No value for the field: Opportunity.Name - Field name: Opportunity.Name

Merged body:
This is another good template body Howard Jones
```

RenderEmailTemplateRequest

Name	Type	Description
`templateBodies`	string[]	An array of text bodies that can contain merge fields, such as `{!Account.Phone}` or `{!Contact.Name}`.
`whatId`	reference	References a non-human object, such as an account, an opportunity, a campaign, a case, or a custom object. The `whatId` is polymorphic, which means that it's an ID that can refer to more than one type of object, such as a case or an opportunity.
`whoId`	reference	References a human object, such as a lead, contact, or user. The `whoId` is polymorphic, which means that it's an ID that can refer to more than one type of object.

Fault

The `renderEmailTemplate()` can return any of these API status codes.

`EMAIL_TEMPLATE_FORMULA_ERROR`

`EMAIL_TEMPLATE_MERGEFIELD_ACCESS_ERROR`

`EMAIL_TEMPLATE_MERGEFIELD_ERROR`

`EMAIL_TEMPLATE_MERGEFIELD_VALUE_ERROR`

`EMAIL_TEMPLATE_PROCESSING_ERROR`

RenderEmailTemplateResult

Contains status and error information for a request processed by the `renderEmailTemplate()` call, including individual results of rendered email templates.

Name	Type	Description
bodyResults	RenderEmailTemplateBodyResult[]	Contains status and error information for each template body that renderEmailTemplate() processed in a request, including merged body text of templates.
errors	Error[]	Contains one or more errors that occurred when renderEmailTemplate() rendered a request.
success	boolean	Indicates whether a request was successfully processed (true) or not (false).

RenderEmailTemplateBodyResult

Contains status and error information for each template body that renderEmailTemplate() processed in a request, including merged body text of templates.

Name	Type	Description
errors	RenderEmailTemplateError[]	Contains one or more errors that are associated with a template body that renderEmailTemplate() processed.
mergedBody	string	The text of the template body with the merge fields replaced with their corresponding values from Salesforce objects. The whatId and whoId fields on the request reference the Salesforce objects to use. The mergedBody field is populated only when the rendering of the template was successful (success is equal to true). If success is equal to false, mergedBody is null.
success	boolean	Indicates whether a template body was successfully rendered (true) or not (false).

RenderEmailTemplateError

An error that occurred when renderEmailTemplate() processed a template body.

Name	Type	Description
fieldName	string[]	The merge field that affected the error condition.
message	string	Error message text.
offset	int	The offset in the template body text of the merge field that caused the error. The offset is calculated as the number of characters from the start of the body text. The offset is -1 if it can't be determined because of insufficient contextual information.
statusCode	StatusCode	A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization (see Generating the WSDL File for Your Organization).

resetPassword()

Changes a user's password to a temporary, system-generated value.

Syntax

```
string password = connection.resetPassword(ID userID);
```

Usage

Use `resetPassword()` to request that the API change the password of a User or SelfServiceUser, and return a system-generated password string of random letters and numbers. Use `setPassword()` instead if you want to set the password to a specific value.

Your client application must be logged in with sufficient access rights to change the password for the specified user. For more information, see Factors that Affect Data Access.

For information on IDs, see ID Field Type.

Sample Code—Java

This sample resets the password for the user specified by the `userId` parameter. It calls `resetPassword()` with this ID and gets the temporary password from the call result. It writes this temporary password to the console and returns it.

```
public String doResetPassword(String userId) {
   String result = "";
   try {
      ResetPasswordResult rpr = connection.resetPassword(userId);
      result = rpr.getPassword();
      System.out.println("The temporary password for user ID " + userId
            + " is " + result);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
   return result;
}
```

Sample Code—C#

This sample resets the password for the user specified by the `userId` parameter. It calls `resetPassword()` with this ID and gets the temporary password from the call result. It writes this temporary password to the console and returns it.

```
public String doResetPassword(String userId)
{
   String result = "";
   try
   {
      ResetPasswordResult rpr = binding.resetPassword(userId);
      result = rpr.password;
      Console.WriteLine("The temporary password for user ID " + userId + " is " +
            result);
   }
```

```
    catch (SoapException e)
    {
       Console.WriteLine("An unexpected error has occurred: " +
                         e.Message + "\n" + e.StackTrace);
    }
    return result;
}
```

Arguments

Name	Type	Description
userID	ID	ID of the User or SelfServiceUser whose password you want to reset. For information on IDs, see ID Field Type.

Response

Name	Type	Description
password	string	New password generated by the API. Once the user logs in with this password, they will be asked to provide a new password. This password is temporary, meaning that it cannot be reused once the user has set his or her new password.

Fault

InvalidIdFault

UnexpectedErrorFault

SEE ALSO:

Utility Calls

sendEmail()

Immediately sends an email message.

Syntax

For single email messages:

```
SendEmailResult = connection.sendEmail(SingleEmailMessage emails[]);
```

For mass email messages:

```
SendEmailResult = connection.sendEmail(MassEmailMessage emails[]);
```

Usage

Use this call with Lightning Platform AppExchange applications, custom applications, or other applications outside of Salesforce to send individual and mass email. The email can include all standard email attributes (such as subject line and blind carbon copy address), use Salesforce email templates, and be in plain text or HTML format. You can use Salesforce to track the status of HTML email, including the date the email was sent, first opened, last opened, and the total number of times it was opened. (See "Tracking HTML Email" in the Salesforce online help for more information.)

The email address of the logged-in user is inserted in the `From Address` field of the email header. All return email and out-of-office replies go to the logged-in user. If bounce management is enabled and `SingleEmailMessage.targetObjectId` or `MassEmailMessage.targetObjectIds` is set, bounces are processed by Salesforce automatically, and the appropriate records are updated; otherwise, they go to the logged-in user. Bounce management works for contacts and leads only.

Note:

- Single email messages sent with this call count against the sending organization's daily single email limit. When this limit is reached, `sendEmail()` calls using SingleEmailMessage are rejected, and the user receives a `SINGLE_EMAIL_LIMIT_EXCEEDED` error code. However, single emails sent through the application are allowed.
- Mass email messages sent with this call count against the sending organization's daily mass email limit. When this limit is reached, `sendEmail()` calls using MassEmailMessage are rejected, and the user receives a `MASS_MAIL_LIMIT_EXCEEDED` error code.
- Starting in API version 35.0, you can enforce or ignore the **Email Opt Out** setting for contacts or leads with the `optOutPolicy` field of `SingleEmailMessage`. The `optOutPolicy` field applies to recipients in the To, CC, and BCC lists of the email. By default and in earlier versions, `SingleEmailMessage` ignores the **Email Opt Out** setting of recipients and the email is sent to all recipients. When using `MassEmailMessage`, the **Email Opt Out** setting of the recipients is always enforced—emails aren't sent to recipients that have opted out and are sent to all other recipients.

SingleEmailMessage has an optional field called `OrgWideEmailAddressId`. This is an object ID to an OrgWideEmailAddress object. If `OrgWideEmailAddressId` is set, the OrgWideEmailAddress.`DisplayName` field is used in the email header, instead of the logged-in user's `Display Name`. The sending email address in the header is also set to the field defined in OrgWideEmailAddress.`Address`.

Note: If both the `DisplayName` in an OrgWideEmailAddress and `senderDisplayName` are defined, the user receives a `DUPLICATE_SENDER_DISPLAY_NAME` error.

Sample Code—Java

This sample creates an email message and sets its fields, including the To, CC and BCC recipients, subject, and body text. It also sets a recipient to the ID of the logged-in user using the `setTargetObjectId` method, which causes the email to be sent to the email address of the specified user. The sample creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail() {
   try {
      EmailFileAttachment efa = new EmailFileAttachment();
      byte[] fileBody = new byte[1000000];
      efa.setBody(fileBody);
      efa.setFileName("attachment");
      SingleEmailMessage message = new SingleEmailMessage();
      message.setBccAddresses(new String[] {
         "someone@salesforce.com"
      });
```

```
        message.setCcAddresses(new String[] {
            "person1@salesforce.com", "person2@salesforce.com", "003xx00000a1b2cAAC"
        });
        message.setBccSender(true);
        message.setEmailPriority(EmailPriority.High);
        message.setReplyTo("person1@salesforce.com");
        message.setSaveAsActivity(false);
        message.setSubject("This is how you use the " + "sendEmail method.");
        // We can also just use an id for an implicit to address
        GetUserInfoResult guir = connection.getUserInfo();
        message.setTargetObjectId(guir.getUserId());
        message.setUseSignature(true);
        message.setPlainTextBody("This is the humongous body "
                + "of the message.");
        EmailFileAttachment[] efas = { efa };
        message.setFileAttachments(efas);
        message.setToAddresses(new String[] { "person3@salesforce.com" });
        SingleEmailMessage[] messages = { message };
        SendEmailResult[] results = connection.sendEmail(messages);
        if (results[0].isSuccess()) {
            System.out.println("The email was sent successfully.");
        } else {
            System.out.println("The email failed to send: "
                  + results[0].getErrors()[0].getMessage());
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

This example shows how to send an email with the opt-out setting enforced. Recipients are specified by their IDs. The `SendEmailOptOutPolicy.FILTER` option causes the email to be sent only to recipients that haven't opted out from email.

```
SingleEmailMessage message = new SingleEmailMessage();
// Set recipients to two contact IDs.
// Replace IDs with valid record IDs in your org.
message.setToAddresses(new String[] { "003D000000QDexS", "003D000000QDfW5" });
message.setOptOutPolicy(SendEmailOptOutPolicy.FILTER);
message.setSubject("Opt Out Test Message");
message.setPlainTextBody("This is the message body.");
SingleEmailMessage[] messages = { message };
SendEmailResult[] results = connection.sendEmail(messages);
if (results[0].isSuccess()) {
    System.out.println("The email was sent successfully.");
} else {
    System.out.println("The email failed to send: "
          + results[0].getErrors()[0].getMessage());
}
```

Sample Code—C#

This sample creates an email message and sets its fields, including the To, CC and BCC recipients, subject, and body text. It also sets a recipient to the ID of the logged-in user using the `setTargetObjectId` method, which causes the email to be sent to the email address of the specified user. The sample creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail()
{
   try
   {
      EmailFileAttachment efa = new EmailFileAttachment();
      byte[] fileBody = new byte[1000000];
      efa.body = fileBody;
      efa.fileName = "attachment";
      SingleEmailMessage message = new SingleEmailMessage();
      message.setBccAddresses(new String[] {
         "someone@salesforce.com"
      });
      message.setCcAddresses(new String[] {
         "person1@salesforce.com", "person2@salesforce.com", "003xx00000a1b2cAAC"
      });
      message.bccSender = true;
      message.emailPriority = EmailPriority.High;
      message.replyTo = "person1@salesforce.com";
      message.saveAsActivity = false;
      message.subject = "This is how you use the " + "sendEmail method.";
      // We can also just use an id for an implicit to address
      GetUserInfoResult guir = binding.getUserInfo();
      message.targetObjectId = guir.userId;
      message.useSignature = true;
      message.plainTextBody = "This is the humongous body "
            + "of the message.";
      EmailFileAttachment[] efas = { efa };
      message.fileAttachments = efas;
      message.toAddresses = new String[] { "person3@salesforce.com" };
      SingleEmailMessage[] messages = { message };
      SendEmailResult[] results = binding.sendEmail(messages);
      if (results[0].success)
      {
         Console.WriteLine("The email was sent successfully.");
      }
      else
      {
         Console.WriteLine("The email failed to send: "
               + results[0].errors[0].message);
      }
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

This example shows how to send an email with the opt-out setting enforced. Recipients are specified by their IDs. The `SendEmailOptOutPolicy.FILTER` option causes the email to be sent only to recipients that haven't opted out from email.

```
SingleEmailMessage message = new SingleEmailMessage();
// Set recipients to two contact IDs.
// Replace IDs with valid record IDs in your org.
message.toAddresses = new String[] { "003D000000QDexS", "003D000000QDfW5" };
message.optOutPolicy = SendEmailOptOutPolicy.FILTER;
message.subject = "Opt Out Test Message";
message.plainTextBody = "This is the message body.";
SingleEmailMessage[] messages = { message };
SendEmailResult[] results = binding.sendEmail(messages);
if (results[0].success)
{
    Console.WriteLine("The email was sent successfully.");
} else {
    Console.WriteLine("The email failed to send: "
          + results[0].errors[0].message);
}
```

BaseEmail

The following table contains the arguments used in both single and mass email.

Note: If templates are not being used, all email content must be in plain text, HTML, or both.

Name	Type	Description
bccSender	boolean	Indicates whether the email sender receives a copy of the email that is sent. For a mass mail, the sender is only copied on the first email sent. Note: If the BCC compliance option is set at the organization level, the user cannot add BCC addresses on standard messages. The following error code is returned: `BCC_NOT_ALLOWED_IF_BCC_ COMPLIANCE_ ENABLED`. Contact your Salesforce representative for information on BCC compliance.
saveAsActivity	boolean	Optional. The default value is `true`, meaning the email is saved as an activity. This argument only applies if the recipient list is based on `targetObjectId` or `targetObjectIds`. If HTML email tracking is enabled for the organization, you will be able to track open rates.
useSignature	boolean	Indicates whether the email includes an email signature if the user has one configured. The default is `true`, meaning if the user has a signature it is included in the email unless you specify `false`.
emailPriority	picklist	Optional. The priority of the email. • Highest • High • Normal • Low

Name	Type	Description
		• Lowest The default is Normal.
`replyTo`	string	Optional. The email address that receives the message when a recipient replies. This cannot be set if you are using a Visualforce email template that specifies a `replyTo` value.
`subject`	string	Optional. The email subject line. If you are using an email template and attempt to override the subject line, an error message is returned.
`templateId`	ID	The ID of the template to be merged to create this email.
`senderDisplayName`	string	Optional. The name that appears on the `From` line of the email. This cannot be set if the object associated with a `OrgWideEmailAddressId` for a SingleEmailMessage has defined its `DisplayName` field.

SingleEmailMessage

The following table contains the arguments single email uses in addition to the base email arguments.

Name	Type	Description
`bccAddresses`	string[]	Optional. An array of blind carbon copy (BCC) addresses or object IDs of the contacts, leads, and users you're sending the email to. The maximum number of `bccAddresses` is 25. This argument is allowed only when a template is not used. You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. If the BCC COMPLIANCE option is set at the organization level, the user cannot add BCC addresses on standard messages. The following error code is returned: `BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`ccAddresses`	string[]	Optional. An array of carbon copy (CC) addresses or object IDs of the contacts, leads, and users you're sending the email to. The maximum number of `ccAddresses` is 25. This argument is allowed only when a template is not used.

Name	Type	Description
		You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`charset`	string	Optional. The character set for the email. If this value is null, the user's default value is used. Unavailable if specifying `templateId` because the template specifies the character set.
`documentAttachments`	ID[]	**Deprecated. Use `entityAttachments` instead.** Optional. An array listing the ID of each Document you want to attach to the email.
`entityAttachments`	ID[]	Optional. Array of IDs of Document, ContentVersion, or Attachment items to attach to the email. This field is available in API version 35.0 and later.
`fileAttachments`	EmailFileAttachment[]	Optional. An array listing the file names of the binary and text files you want to attach to the email. You can attach multiple files as long as the total size of all attachments does not exceed 10 MB.
`htmlBody`	string	Optional. The HTML version of the email, specified by the sender. The value is encoded according to the specification associated with the organization.
`inReplyTo`	string	Optional. The In-Reply-To field of the outgoing email. Identifies the emails to which this one is a reply (parent emails). Contains the parent emails' Message-IDs. See `RFC2822 - Internet Message Format`.
`optOutPolicy`	SendEmailOptOutPolicy (enumeration of type string)	Optional. If you added recipients by ID instead of email address and the `Email Opt Out` option set, this field determines the behavior of the `sendEmail()` call. The opt-out settings for recipients added by their email addresses aren't checked and those recipients always receive the email. Possible values of the `SendEmailOptOutPolicy` enumeration are: • `SEND` (default)—The email is sent to all recipients and the `Email Opt Out` option of the recipients is ignored. • `FILTER`—No email is sent to the recipients that have the `Email Opt Out` option set and emails are sent to the other recipients.

Name	Type	Description
		• `REJECT`—If any of the recipients have the `Email Opt Out` option set, `sendEmail()` throws an error and no email is sent. This field is available in API version 35.0 and later.
`orgWideEmailAddressId`	ID	Optional. The object ID of the OrgWideEmailAddress associated with the outgoing email. OrgWideEmailAddress.`DisplayName` cannot be set if the `senderDisplayName` field is already set.
`plainTextBody`	string	Optional. The text version of the email, specified by the sender.
`references`	string	Optional. The References field of the outgoing email. Identifies an email thread. Contains the parent emails' Message-ID and References fields and possibly In-Reply-To fields. See `RFC2822 - Internet Message Format`.
`targetObjectId`	ID	Optional. The object ID of the contact, lead, or user the email will be sent to. The object ID you enter sets the context and ensures that merge fields in the template contain the correct data All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`toAddresses`	string[]	Optional. An array of email addresses or object IDs of the contacts, leads, or users you're sending the email to. The maximum number of `toAddresses` is 100. This argument is allowed only when a template is not used. You can specify opt-out email options with the `optOutPolicy` field only for those recipients who were added by their IDs. Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced. All emails must have a recipient value in at least one of the following fields: • `toAddresses` • `ccAddresses` • `bccAddresses` • `targetObjectId`
`treatBodiesAsTemplate`	boolean	Optional. If set to `true`, the subject, plain text, and HTML text bodies of the email are treated as template data. The merge fields

Name	Type	Description
		are resolved using the `renderEmailTemplate()` call. Default is `false`. This field is available in API version 35.0 and later.
`treatTargetObjectAsRecipient`	boolean	Optional. If set to `true`, the `targetObjectId` (a contact, lead, or user) is the recipient of the email. If set to `false`, the `targetObjectId` is supplied as the `WhoId` field for template rendering but isn't a recipient of the email. The default is `true`. This field is available in API version 35.0 and later. In prior versions, the `targetObjectId` is always a recipient of the email.
`whatId`	ID	Optional. If you specify a contact for the `targetObjectId` field, you can specify a `whatId` as well. This field helps to further ensure that merge fields in the template contain the correct data. The value must be one of the following types: • `Account` • `Asset` • `Campaign` • `Case` • `Contract` • `Opportunity` • `Order` • `Product` • `Solution` • `Custom`

MassEmailMessage

The following table contains the arguments mass email uses in addition to the base email arguments.

Name	Type	Description
`description`	string	A value used internally to identify the object in the mass email queue.
`targetObjectIds`	ID[]	An array of object IDs of the contacts, leads, or users the email will be sent to. The object IDs you enter set the context and ensure that merge fields in the template contain the correct data. The objects must be of the same type (either all contacts, all leads, or all users). You can list up to 250 IDs per email. If you specify a value for the `targetObjectIds` field, optionally specify a `whatId` as well to set the email context to a user, contact, or lead. This ensures that merge fields in the template contain the correct data.
`whatIds`	ID[]	Optional. If you specify an array of contacts for the `targetObjectIds` field, you can specify an array of `whatIds` as well. This helps to further ensure that

Name	Type	Description
		merge fields in the template contain the correct data. The values must be one of the following types: • Contract • Case • Opportunity • Product If you specify `whatIds`, specify one for each `targetObjectId`; otherwise, you will receive an `INVALID_ID_FIELD` error.

EmailFileAttachment

The following table contains properties that the EmailFileAttachment uses in the SingleEmailMessage object to specify attachments passed in as part of the request, as opposed to a Document passed in using the `documentAttachments` argument.

Property	Type	Description
`body`	base64	The attachment itself.
`contentType`	string	Optional. The attachment's Content-Type.
`fileName`	string	The name of the file to attach.
`inline`	boolean	Optional. Specifies a Content-Disposition of inline (`true`) or attachment (`false`). In most cases, inline content is displayed to the user when the message is opened. Attachment content requires user action to be displayed.

Response

SendEmailResult

Fault

The following API status codes can be returned. Also, `sendEmail()` can return other errors when rendering email templates. See `renderEmailTemplate()` Faults.

`BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`

`BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`

`DUPLICATE_SENDER_DISPLAY_NAME`

`EMAIL_ADDRESS_BOUNCED`

`EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR`

`EMAIL_OPTED_OUT`

`ERROR_IN_MAILER`

`INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY`

INVALID_CONTENT_TYPE

INVALID_EMAIL_ADDRESS

INVALID_ID_FIELD

INVALID_MESSAGE_ID_REFERENCE

INVALID_SAVE_AS_ACTIVITY_FLAG

LIMIT_EXCEEDED

MALFORMED_ID

MASS_MAIL_LIMIT_EXCEEDED

NO_MASS_MAIL_PERMISSION

REQUIRED_FIELD_MISSING

SINGLE_EMAIL_LIMIT_EXCEEDED

TEMPLATE_NOT_ACTIVE

UNVERIFIED_SENDER_ADDRESS

SendEmailResult

The `sendEmail()` call returns a list of SendEmailResult objects. Each SendEmailResult object has the following properties:

Name	Type	Description
`success`	boolean	If sending single email: Indicates whether the email was successfully accepted for delivery by the message transfer agent (`true`) or not (`false`). Even if `success = true`, it does not mean the intended recipients received the email, as it could have bounced or been blocked by a spam blocker. Also, even if the email is successfully accepted for delivery by the message transfer agent, there can still be errors in the error array related to individual addresses within the email. If sending mass email: Indicates whether the email was successfully added to the queue for processing (`true`) or not (`false`). Even if the email was added to the queue, there can still be processing errors that prevent delivery to the intended recipients.
`SendEmailError`	Error[]	If an error occurred during the `sendEmail()` call, a list of `SendEmailError` objects is returned. For single email, errors indicate that Salesforce wasn't able to deliver the email. For mass email, errors indicate that the email wasn't added to the queue for processing.

SendEmailError

SendEmailError can have the following attributes:

Name	Type	Description
`Fields`	Field[]	Reserved for future use. Array of one or more field names. Identifies which fields in the object, if any, affected the error condition.

Name	Type	Description
`Message`	string	Error message text.
`StatusCode`	`statusCode`	A code that characterizes the error. The full list of status codes is available in the WSDL file for your organization.
`TargetObjectId`	ID	The object ID of the target for which the error occurred.

Note: If an error occurs that prevents `sendEmail()` from sending the email to one or more targets, each `TargetObjectId` for those targets has an associated error in SendEmailResult. A `TargetObjectId` that does not have an associated error in SendEmailResult indicates the email was sent to the target. If SendEmailResult has an error that does not have an associated `TargetObjectId`, no email was sent.

The following is an example of how to parse through a resulting set for errors:

```
Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
email.setToAddresses(new String[] { 'admin@acme.com' });
email.setSubject('my subject');
email.setPlainTextBody('plain text body');
List<Messaging.SendEmailResult> results =
    Messaging.sendEmail(new Messaging.Email[] { email });
if (!results.get(0).isSuccess()) {
    System.StatusCode statusCode = results.get(0).getErrors()[0].getStatusCode();
    String errorMessage = results.get(0).getErrors()[0].getMessage();
}
```

`sendEmailMessage()`

Immediately sends up to 10 draft email messages.

Syntax

For Enterprise SOAP:

```
SendEmailResult[] = connection.sendEmailMessage( String[] draftEmailIds);
```

For Partner SOAP:

```
SendEmailResult[] = connection.sendEmailMessage( ID[] draftEmailIds);
```

Usage

Use this call with Lightning Platform AppExchange applications, custom applications, or other applications outside of Salesforce to send up to 10 draft email messages. The messages can include all standard email attributes (such as subject line and blind carbon copy address), use Salesforce email templates, and be in plain text or HTML format. You can use Salesforce to track the status of HTML email, including the date the email was sent, first opened, last opened, and the total number of times it was opened. (See “Tracking HTML Email” in the Salesforce online help for more information.)

The email address of the logged-in user is inserted in the `From Address` field of the email header. All return email and out-of-office replies go to the logged-in user. If bounce management is enabled and `SingleEmailMessage.targetObjectId` or

MassEmailMessage.targetObjectIds is set, bounces are processed by Salesforce automatically, and the appropriate records are updated; otherwise, they go to the logged-in user. Bounce management works for contacts and leads only.

Note:

- Email messages sent with this call count against the sending organization's daily single email limit. When this limit is reached, sendEmailMessage() calls using SingleEmailMessage are rejected, and the user receives a SINGLE_EMAIL_LIMIT_EXCEEDED error code. However, single emails sent through the application are allowed.
- Mass email messages sent with this call count against the sending organization's daily mass email limit. When this limit is reached, sendEmail() calls using MassEmailMessage are rejected, and the user receives a MASS_MAIL_LIMIT_EXCEEDED error code.
- The AllOrNone header is not honored by this call. sendEmailMessage() returns partial success even if the AllOrNone header is set to true.

Sample Code—Java

This sample creates a case and a draft email message, and sets the message fields, including the From, To, CC, and BCC recipients, subject, and body text. It also creates an attachment and sends the email message with the attachment. Finally, it writes a status message or an error message, if any, to the console.

```
public void doSendEmail() {
   try {
      //Create a case
      Case theCase = new Case();
      theCase.setSubject("Sample Case");
      SaveResult[] saveResult = connection.create(new SObject[] { theCase });
      String caseId = saveResult[0].getId();

      //Create a draft EmailMessage
      EmailMessage message = new EmailMessage();
      message.setParentId(theCase.getId());
      message.setBccAddress("bcc@email.com");
      message.setCcAddress("cc1@salesforce.com; cc2@email.com");
      message.setSubject("This is how you use the sendEmailMessage method.");
      message.setFromAddress("from@email.com");
      message.setFromName("Sample Code");
      message.setTextBody("This is the text body of the message.");
      message.setStatus("5"); //"5" means Draft
      message.setToAddress("to@email.com");
      saveResult = connection.create(new SObject[] { message });
      String emailMessageId = saveResult[0].getId();

      //Create an attachment for the draft EmailMessage
      Attachment att = new Attachment();
      byte[] fileBody = new byte[1000000];
      att.setBody(fileBody);
      att.setName("attachment");
      att.setParentId(emailMessageId);
      connection.create(new SObject[] { att });

      //Send the draft EmailMessage
      SendEmailResult[] results = connection.sendEmailMessage(messages);
      if (results[0].isSuccess()) {
```

```
            System.out.println("The email was sent successfully.");
        } else {
            System.out.println("The email failed to send: " +
                results[0].getErrors()[0].getMessage());
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
```

Arguments

None.

Response

SendEmailResult[]

Fault

`BCC_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`

`BCC_SELF_NOT_ALLOWED_IF_BCC_COMPLIANCE_ENABLED`

`EMAIL_NOT_PROCESSED_DUE_TO_PRIOR_ERROR`

`ERROR_IN_MAILER`

`INSUFFICIENT_ACCESS_ON_CROSS_REFERENCE_ENTITY`

`INVALID_CONTENT_TYPE`

`INVALID_EMAIL_ADDRESS`

`INVALID_ID_FIELD`

`INVALID_MESSAGE_ID_REFERENCE`

`LIMIT_EXCEEDED`

`MALFORMED_ID`

`REQUIRED_FIELD_MISSING`

`SINGLE_EMAIL_LIMIT_EXCEEDED`

`TEMPLATE_NOT_ACTIVE`

`UNVERIFIED_SENDER_ADDRESS`

setPassword()

Sets the specified user's password to the specified value.

Syntax

```
SetPasswordResult setPasswordResult = connection.setPassword(ID userID, string password);
```

Usage

Use `setPassword()` to change the password of a User or SelfServiceUser to a value that you specify. For example, a client application might prompt a user to specify a different password, and then invokes `setPassword()` for an admin to change the user's password. Use `resetPassword()` instead if you want to reset the password with a random value generated by the API.

This call can be used to allow users to change their own passwords, as long as their org's Password Policies setting **Allow use of setPassword() API for self-resets** is enabled. Otherwise, use `changeOwnPassword()`, which is more secure because it verifies the user's current password before allowing the change.

Your client application must be logged in with sufficient access rights to change the password for the specified user. For more information, see Factors that Affect Data Access.

For information on IDs, see ID Field Type.

This call can use the session ID returned in LoginResult if the password has expired. For more information, see `passwordExpired`.

Sample Code—Java

This sample accepts user ID and password parameters, which it uses in the `setPassword()` call to set the password of the specified user.

```
public void doSetPassword(String userId, String newPasswd) {
   try {
      SetPasswordResult result = connection.setPassword(userId, newPasswd);
      System.out.println("The password for user ID " + userId + " changed to "
            + newPasswd);
   } catch (ConnectionException ce) {
      ce.printStackTrace();
   }
}
```

Sample Code—C#

This sample accepts user ID and password parameters, which it uses in the `setPassword()` call to set the password of the specified user.

```
public void doSetPassword(String userId, String newPasswd)
{
   try
   {
      SetPasswordResult result = binding.setPassword(userId, newPasswd);
      Console.WriteLine("The password for user ID " + userId + " changed to "
            + newPasswd);
   }
   catch (SoapException e)
   {
      Console.WriteLine("An unexpected error has occurred: " +
                        e.Message + "\n" + e.StackTrace);
   }
}
```

Arguments

Name	Type	Description
`userID`	ID	ID of the User or SelfServiceUser whose password you want to reset. For information on IDs, see ID Field Type.
`password`	string	New password to use for the specified user.

Response

SetPasswordResult (empty)

Fault

`InvalidIdFault`

`UnexpectedErrorFault`

SEE ALSO:

resetPassword()

Utility Calls

changeOwnPassword()

CHAPTER 12 SOAP Headers

The API provides SOAP headers to client applications.

Header	Description
AllOrNoneHeader	Specifies whether a call rolls back all changes unless all records are processed successfully. This header is available in API version 20.0 and later.
AllowFieldTruncationHeader	Specifies the truncation behavior for some field types in API version 15.0 and later.
AssignmentRuleHeader	Specifies the assignment rule to use when creating or updating an Account, Case, or Lead.
CallOptions	Specifies the call options for an API request.
DebuggingHeader	Returns the debug log in the output header, `DebuggingInfo`, and specifies the level of detail in the debug log.
DisableFeedTrackingHeader	Specifies whether the changes made in the current call are tracked in feeds.
EmailHeader	Sends an email notification when a request is processed. Provides equivalent functionality for the Salesforce user interface.
LimitInfoHeader	A response header returned from calls to the SOAP API. This header returns limit information for the organization. Use this header to monitor your API limits as you make calls against the organization.
LocaleOptions	Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.
LoginScopeHeader	Specifies the organization ID so that you can authenticate Self-Service users for your organization using the `login()` call.
MruHeader	Indicates whether to update the list of most recently used items (`true`) or not (`false`).
OwnerChangeOptions	Specifies ownership of attachments and notes.
PackageVersionHeader	Specifies the package version for each installed managed package in API version 16.0 and later.
QueryOptions	Specifies the batch size for query results.
SessionHeader	Specifies the session ID returned from the login server after a successful `login()`.
UserTerritoryDeleteHeader	Specifies a user to whom open opportunities are assigned when the current owner is removed from a territory.

AllOrNoneHeader

Allows a call to roll back all changes unless all records are processed successfully.

Without the AllOrNoneHeader header, records without errors are committed, while records with errors are marked as failed in the call results. This header is available in API version 20.0 and later.

Even if the header is enabled, it's still necessary to inspect the `success` field in the call result for each record to identify records with errors. Each `success` field contains `true` or `false` indicating whether the call was processed successfully.

If there is an error associated with at least one record, the `errors` field in the call result for the record gives more information on the error. If other records in the same call have no errors, their `errors` fields indicate that they were rolled back due to other errors.

API Calls

`create()`, `delete()`, `undelete()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`allOrNone`	boolean	If `true`, any failed records in a call cause all changes for the call to be rolled back. Record changes aren't committed unless all records are processed successfully. The default is `false`. Some records can be processed successfully while others are marked as failed in the call results.

Sample Code—Java

This sample shows how to use the `AllOrNoneHeader`. It attempts to create two contacts. The second contact doesn't have all required fields set and causes a failure on creation. Next, the sample sets the `allOrNone` field to `true`, and then attempts to create the contacts. Creating one of the contacts results in an error, so the entire transaction is rolled back and no contacts are created.

```
public void allOrNoneHeaderSample() {
  try {
    // Create the first contact.
    SObject[] sObjects = new SObject[2];
    Contact contact1 = new Contact();
    contact1.setFirstName("Robin");
    contact1.setLastName("Van Persie");

    // Create the second contact. This contact doesn't
    // have a value for the required
    // LastName field so the create will fail.
    Contact contact2 = new Contact();
    contact2.setFirstName("Ashley");
    sObjects[0] = contact1;
    sObjects[1] = contact2;

    // Set the SOAP header to roll back the create unless
```

```
      // all contacts are successfully created.
      connection.setAllOrNoneHeader(true);
      // Attempt to create the two contacts.
      SaveResult[] sr = connection.create(sObjects);
      for (int i = 0; i < sr.length; i++) {
        if (sr[i].isSuccess()) {
          System.out.println("Successfully created contact with id: " +
            sr[i].getId() + ".");
        }
        else {
          // Note the error messages as the operation was rolled back
          // due to the all or none header.
          System.out.println("Error creating contact: " +
            sr[i].getErrors()[0].getMessage());
          System.out.println("Error status code: " +
            sr[i].getErrors()[0].getStatusCode());
        }
      }
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
  }
}
```

AllowFieldTruncationHeader

Specifies that for some fields, when a string is too large, the operation fails. Without the header, strings for these fields are truncated.

The `AllowFieldTruncationHeader` header affects the following datatypes:

- anyType, if it represents one of the other datatypes in this list
- email
- encryptedstring
- multipicklist
- phone
- picklist
- string
- textarea

In API versions previous to 15.0, if a value for one of the listed fields is too large, the value is truncated.

For API version 15.0 and later, if a value is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. `AllowFieldTruncationHeader` allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later.

This header has no effect in versions 14.0 and earlier.

API Calls

`convertLead()`, `create()`, `merge()`, `process()`, `undelete()`, `update()`, and `upsert()`

Apex: `executeanonymous()`

Fields

Element Name	Type	Description
`allowFieldTruncation`	boolean	If `true`, truncate field values that are too long, which is the behavior in API versions 14.0 and earlier. Default is `false`: no change in behavior. If a `string` or `textarea` value is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned. The following list shows the field types affected by truncation and this header: • anyType, if it represents one of the other datatypes in this list • email • encryptedstring • multipicklist • phone • picklist • string • textarea

Sample Code—Java

To create an account with a name that is too long for the `Name` field, use the AllowFieldTruncation header.

This sample:

1. Creates an Account object with a name that exceeds the field limit of 255 characters.
2. Sends the create call, which fails because of the name field length.
3. Sets the `AllowFieldTruncationHeader` to `true` and retries the account creation, which succeeds.

```
public void allowFieldTruncationSample() {
  try {
    Account account = new Account();
    // Construct a string that is 256 characters long.
    // Account.Name's limit is 255 characters.
    String accName = "";
    for (int i = 0; i < 256; i++) {
      accName += "a";
    }
    account.setName(accName);
    // Construct an array of SObjects to hold the accounts.
    SObject[] sObjects = new SObject[1];
    sObjects[0] = account;
    // Attempt to create the account. It will fail in API version 15.0
    // and above because the account name is too long.
    SaveResult[] results = connection.create(sObjects);
    System.out.println("The call failed because: "
       + results[0].getErrors()[0].getMessage());
    // Now set the SOAP header to allow field truncation.
    connection.setAllowFieldTruncationHeader(true);
```

```
    // Attempt to create the account now.
    results = connection.create(sObjects);
    System.out.println("The call: " + results[0].isSuccess());
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

AssignmentRuleHeader

The `AssignmentRuleHeader` must be specified in the `create()` or `update()` call of a Case or Lead for the specified assignment rule to be applied, and it must be specified in the `update()` call of an Account for the territory assignment rules to be applied.

API Calls

`create()`, `merge()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`assignmentRuleId`	ID	The ID of a specific assignment rule to run for the Case or Lead. The assignment rule can be active or inactive. The ID can be retrieved by querying the AssignmentRule object. If specified, do not specify `useDefaultRule`. This element is ignored for accounts, because all territory assignment rules are applied. If the value is not in correct ID format (15-character or 18-character Salesforce ID), the call fails and a `MALFORMED_ID` exception is returned.
`useDefaultRule`	boolean	If `true` for a Case or Lead, uses the default (active) assignment rule for a Case or Lead. If specified, do not specify an `assignmentRuleId`. If `true` for an Account, all territory assignment rules are applied, and if `false`, no territory assignment rules are applied.

Sample Code

For a code example, see Lead.

SEE ALSO:

AssignmentRule

CallOptions

Specifies the options needed to work with a specific client. This header is only available for use with the Partner WSDL.

API Calls

The `defaultNamespace` element supports the following calls: `create()`, `merge()`, `queryAll()`, `query()`, `queryMore()`, `retrieve()`, `search()`, `update()`, and `upsert()`.

The `client` element supports all of the above calls, plus the following: `convertLead()`, `login()`, `delete()`, `describeGlobal()`, `describeLayout()`, `describeTabs()`, `describeSObject()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `process()`, `undelete()`, `getServerTimestamp()`, `getUserInfo()`, `setPassword()`, and `resetPassword()`.

Fields

Element Name	Type	Description
`client`	string	A string that identifies a client.
`defaultNamespace`	string	A string that identifies a developer namespace prefix. Use this field to resolve field names in managed packages without having to fully specify the `fieldName` everywhere. For example, if the developer namespace prefix is `battle`, and you have a custom field in your package called `botId`, you can set this header, and then queries such as the following will succeed: `query("SELECT id, botId__c from Account");` In this case the actual field queried is the `battle__botId__c` field. Using this field allows you to write client code without having to specify the namespace prefix. Without this field specified, the full name of the field would have to be used for the query to succeed. In the example above, you would have to specify `battle__botId__c`. Note that if this field is set, and the query specifies the namespace as well, the response will not include the prefix. For example, if you set this header to `battle`, and issue a query like `query("SELECT id, battle__botId__c from Account");`, the response would use a `botId__c` element, not a `battle_botId__c` element. Describe calls ignore this header, so there will be no ambiguity between fields with namespace prefixes and customer fields of the same name without the prefix.

Sample Code—C#

This sample shows how to use the `CallOptions` header. It sets a client ID and a developer namespace prefix, which is used to resolve field names in managed packages. Next, the sample logs the specified user in.

```
public void CallOptionsSample()
{
    // Web Reference to the imported Partner WSDL.
    APISamples.partner.SforceService partnerBinding;

    string username = "USERNAME";
    string password = "PASSWORD";

    // The real Client ID will be an API Token provided by salesforce.com
    // to partner applications following a security review.
    // For more details, see the Security Review FAQ in the online help.
    string clientId = "SampleCaseSensitiveToken/100";

    partnerBinding = new SforceService();
    partnerBinding.CallOptionsValue = new CallOptions();
    partnerBinding.CallOptionsValue.client = clientId;

    // Optionally, if a developer namespace prefix has been registered for
    // your Developer Edition organization, it may also be specified.
    string prefix = "battle";
    partnerBinding.CallOptionsValue.defaultNamespace = prefix;

    try
    {
        APISamples.partner.LoginResult lr =
            partnerBinding.login(username, password);
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Code);
        Console.WriteLine(e.Message);
    }
}
```

DisableFeedTrackingHeader

Specifies that changes made in the current call are tracked in feeds.

Use this header if you want to process many records without tracking the changes in various feeds related to the records. This header is available if the Chatter feature is enabled for your organization.

API Calls

`convertLead()`, `create()`, `delete()`, `merge()`, `process()`, `undelete()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`disableFeedTracking`	boolean	If `true`, the changes made in the current call are not tracked in feeds. The default is `false`.

Sample Code—Java

This sample shows how to use the `DisableFeedTrackingHeader`. It sets this header to `true` to disable feed tracking and then creates many account records in bulk.

```
public void disableFeedTrackingHeaderSample() {
  try {
    // Insert a large number of accounts.
    SObject[] sObjects = new SObject[500];
    for (int i = 0; i < 500; i++)  {
       Account a = new Account();
       a.setName("my-account-" + i);
       sObjects[i] = a;
    }
    // Set the SOAP header to disable feed tracking to avoid generating a
    // large number of feed items because of this bulk operation.
    connection.setDisableFeedTrackingHeader(true);
    // Perform the bulk create. This won't result in 500 feed items, which
    // would otherwise be generated without the DisableFeedTrackingHeader.
    SaveResult[] sr = connection.create(sObjects);
    for (int i = 0; i < sr.length; i++) {
      if (sr[i].isSuccess()) {
        System.out.println("Successfully created account with id: " +
          sr[i].getId() + ".");
      } else {
        System.out.println("Error creating account: " +
          sr[i].getErrors()[0].getMessage());
      }
    }
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

SEE ALSO:

NewsFeed

EntitySubscription

DuplicateRuleHeader

Determines options for using duplicate rules to detect duplicate records. Duplicate rules are part of the Duplicate Management feature.

API Calls

`create()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
allowSave	boolean	For a duplicate rule, when the Alert option is enabled, bypass alerts and save duplicate records by setting this property to `true`. Prevent duplicate records from being saved by setting this property to `false`.
includeRecordDetails	boolean	Get fields and values for records detected as duplicates by setting this property to `true`. Get only record IDs for records detected as duplicates by setting this property to `false`.
runAsCurrentUser	boolean	Make sure that sharing rules for the current user are enforced when duplicate rules run by setting this property to `true`. Use the sharing rules specified in the class for the request by setting this property to `false`. If no sharing rules are specified, Apex code runs in system context and sharing rules for the current user are not enforced.

Java Sample

This sample shows how to use the `DuplicateRuleHeader` to set options for using duplicate rules. To see the entire sample application, see DuplicateResult.

```
_DuplicateRuleHeader header = new _DuplicateRuleHeader();
        header.setAllowSave(false);
        header.setIncludeRecordDetails(true);
        header.setRunAsCurrentUser(true);

        binding.setHeader(new SforceServiceLocator().getServiceName().getNamespaceURI(),
"DuplicateRuleHeader", header);
```

SEE ALSO:

DuplicateResult

DuplicateRule

EmailHeader

The Salesforce user interface allows you to specify whether to send an email when these events occur:

- Create a Case
- Create a CaseComment
- Convert Case email to a Contact
- Send a New User email notification

- Make a `resetPassword()` call

In API versions 8.0 and later, you can also send an API request that sends email.

A group event is an Event for which `IsGroupEvent` is true. The EventRelation object tracks the users, leads, or contacts that are invited to a group event. Note the following behaviors for group event email sent through the API:

- Sending a group event invitation to a User respects the `triggerUserEmail` option
- Sending a group event invitation to a Lead or Contact respects the `triggerOtherEmail` option
- Email sent when updating or deleting a group event also respect `triggerUserEmail` and `triggerOtherEmail`, as appropriate

API Calls

`create()`, `delete()`, `resetPassword()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`triggerAutoResponseEmail`	boolean	Indicates whether to trigger auto-response rules (`true`) or not (`false`), for leads and cases. In the Salesforce user interface, this email can be automatically triggered by a number of events, for example creating a case or resetting a user password. If this value is set to `true`, when a Case is created, if there is an email address for the contact specified in `ContactId`, the email is sent to that address. If not, the email is sent to the address specified in `SuppliedEmail`.
`triggerOtherEmail`	boolean	Indicates whether to trigger email outside the organization (`true`) or not (`false`). In the Salesforce user interface, this email can be automatically triggered by creating, editing, or deleting a contact for a case.
`triggerUserEmail`	boolean	Indicates whether to trigger email that is sent to users in the organization (`true`) or not (`false`). In the Salesforce user interface, this email can be automatically triggered by a number of events; resetting a password, creating a new user, or adding comments to a case.

Sample Code—Java

This sample shows how to use the `EmailHeader`. It sets the `triggerAutoResponseEmail` email header field to `true`, which triggers an email to be sent when a case is created. Next, it creates a case. This sample assumes an auto-response rule has been set for cases, and an email address is specified in the contact referenced by `ContactId`.

```
public void createCaseWithAutoResponse(String contactId) {
  try {
    connection.setEmailHeader(true, false, false);
    Case c = new Case();
    c.setSubject("Sample Subject");
```

```
    c.setContactId(contactId);
    SaveResult[] sr = connection.create(new SObject[] { c });
    // Parse sr array to see if case was created successfully.
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

LimitInfoHeader

A response header returned from calls to the SOAP API. This header returns limit information for the organization. Use this header to monitor your API limits as you make calls against the organization.

API Calls

All calls, except for `login()`.

Fields

Element Name	Type	Description
`current`	string	The number of calls for the specified limit type that have already been used in the organization.
`limit`	string	The organization's limit for the specified limit type.

`type`	string	The type of limit information specified in the header.
		• `API REQUESTS`—contains limit information about API calls for the organization.
		• `API REQUESTS PER APP`—contains limit quota information, if there is any, for the currently connected app. API limit app quotas are currently available through a pilot program. For information on enabling this feature for your organization, contact Salesforce. This example includes the limit quota for a `sample-connected-app` connected app.
		`<limitInfo>`
		`    <appName>sample-connected-app</appName>`
		`    <current>20</current>`
		`    <limit>250</limit>`
		`    <type>API REQUESTS PER APP</type>`
		`</limitInfo>`

Sample Code

This is an example of a response to a SOAP request for a Merchandise record. The `LimitInfoHeader` contains the API usage information for the organization.

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
   xmlns="urn:partner.soap.sforce.com" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

    xmlns:sf="urn:sobject.partner.soap.sforce.com">
    <soapenv:Header>
        <LimitInfoHeader>
            <limitInfo>
                <current>5</current>
                <limit>5000</limit>
                <type>API REQUESTS</type>
            </limitInfo>
        </LimitInfoHeader>
    </soapenv:Header>
    <soapenv:Body>
        <queryResponse>
            <result xsi:type="QueryResult">
                <done>true</done>
                <queryLocator xsi:nil="true"/>
                <records xsi:type="sf:sObject">
                    <sf:type>dev_ns__Merchandise__c</sf:type>
                    <sf:Id>a00D0000008pQSNIA2</sf:Id>
                    <sf:dev_ns__Description__c>Phone Case for iPhone
                        4/4S</sf:dev_ns__Description__c>
                    <sf:dev_ns__Price__c>16.99</sf:dev_ns__Price__c>
                    <sf:dev_ns__Stock_Price__c>12.99</sf:dev_ns__Stock_Price__c>
                    <sf:dev_ns__Total_Inventory__c>108.0</sf:dev_ns__Total_Inventory__c>
                    <sf:Id>a00D0000008pQSNIA2</sf:Id>
                </records>
                <size>1</size>
            </result>
        </queryResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

LocaleOptions

Specifies the language of the labels returned.

API Calls

`describeSObject()`, `describeSObjects()`, `describeDataCategoryGroups()`, `describeDataCategoryGroupStructures()`

Fields

Element Name	Type	Description
`language`	string	Specifies the language of the labels returned. The value must be a valid user locale (language and country), such as `de_DE` or `en_GB`. For more information on locales, see the `Language` field on the CategoryNodeLocalization object.

Sample Code—Java

This sample sets the `LocaleOptions` header to the locale of the logged-in user, and then performs a describe on Account.

```
public void localeOptionsExample() {
  try {
    connection.setLocaleOptions("en_US");
    connection.describeSObject("Account");
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

LoginScopeHeader

Specifies your organization ID so that you can authenticate Self-Service users for your organization using the existing `login()`.

API Calls

`login()`

Fields

Element Name	Type	Description
`organizationId`	ID	The ID of the organization against which you will authenticate Self-Service users.
`portalId`	ID	Specify only if user is a Customer Portal user. The ID of the portal for this organization. The ID is available in the Salesforce user interface: • From Setup, enter *`Customer Portal Settings`* in the `Quick Find` box, then select **Customer Portal Settings** • Select a Customer Portal name, and on the Customer Portal detail page, the URL of the Customer Portal displays. The Portal ID is in the URL.

Sample Code—C#

This sample shows how to use the `LoginScopeHeader`. It sets the organization ID and the portal ID for a Customer Portal user. It also sets the `CallOptions` header. It then logs the specified user in.

```
/// Demonstrates how to set the LoginScopeHeader values.
public void LoginScopeHeaderSample()
{
    // Web Reference to the imported Partner WSDL.
    APISamples.partner.SforceService partnerBinding;

    string username = "USERNAME";
    string password = "PASSWORD";

    // The real Client ID will be an API Token provided by salesforce.com
    // to partner applications following a security review. For more details,
    // see the Security Review FAQ in the online help.
    string clientId = "SampleCaseSensitiveToken/100";

    partnerBinding = new SforceService();
    partnerBinding.CallOptionsValue = new CallOptions();
    partnerBinding.CallOptionsValue.client = clientId;

    // To authenticate Self-Service users, we need to set the OrganizationId
    // in the LoginScopeHeader.
    string orgId = "00ID0000OrgFoo";
    partnerBinding.LoginScopeHeaderValue = new LoginScopeHeader();
    partnerBinding.LoginScopeHeaderValue.organizationId = orgId;
    // Specify the Portal ID if the user is a Customer Portal user.
    string portalId = "00ID0000FooPtl";
    partnerBinding.LoginScopeHeaderValue.portalId = portalId;

    try
    {
        APISamples.partner.LoginResult lr =
            partnerBinding.login(username, password);
    }
    catch (SoapException e)
    {
        Console.WriteLine(e.Code);
        Console.WriteLine(e.Message);
    }
}
```

MruHeader

In API version 7.0 and later, the `create()`, `update()`, and `upsert()` calls do not update the list of most recently used (MRU) items in the Recent Items section of the sidebar in the Salesforce user interface unless this header is used. Be advised that using this header to update the Recent Items list may negatively impact performance.

API Calls

create(), merge(), query(), retrieve(), update(), upsert()

Fields

Element Name	Type	Description
updateMru	boolean	Indicates whether to update the list of most recently used items (`true`) or not (`false`). For retrieve(), if the result has only one row, the MRU is updated to the ID of the retrieve result. For query(), if the result has only one row and the ID field is selected, the MRU is updated to the ID of the query result.

Sample Code—Java

This sample turns on the MRU list update option by setting the `MruHeader` to `true`. Next, it creates an account.

```
public void mruHeaderSample() {
  connection.setMruHeader(true);
  Account account = new Account();
  account.setName("This will be in the MRU");
  try {
    SaveResult[] sr = connection.create(new SObject[]{account});
    System.out.println("ID of account added to MRU: " +
      sr[0].getId());
  } catch (ConnectionException ce) {
    ce.printStackTrace();
  }
}
```

OwnerChangeOptions

Represents actions that can be performed when a record's owner is changed. Available with these options in API version 35.0 and later.

API Calls

update(), upsert()

Fields

Element Name	Type	Description
options	OwnerChangeOption[]	Represents a flag for a specific action performed when changing a record owner through an update or upsert call.

OwnerChangeOption Fields

Element Name	Type	Description
`execute`	boolean	If `true`, the action represented by the type field is performed. If `false`, the action represented by the type field is skipped.
`type`	enum of a string	Represents the action performed or skipped, according to the given value for the execute field, when changing a record owner during an update or upsert call. The following types can be used. **EnforceNewOwnerHasReadAccess** If true, the record's new owner must have at least read access on the record. Available in API version 36.0 and later. **TransferOpenActivities** If true, the record's open activities are transferred to the new owner **TransferNotesAndAttachments** If true, the record's notes, attachments, and Google Docs are transferred to the new record owner. If false, the original record owner retains ownership. **TransferOtherOpenOpportunities** If true and the record is an account, open opportunities associated with the account and not owned by the current record owner are transferred to the new owner. TransferOwnedOpenOpportunities must be set to execute when executing this option. **TransferOwnedOpenOpportunities** If true and the record is an account, open opportunities associated with the account and owned by the account owner are transferred to the new owner. **TransferContracts** If true and the record is an account, contracts associated with the account and owned by the account owner are transferred to the new owner. **TransferOrders** If true and the record is an account, the draft standalone orders associated with the account and draft orders associated with transferred contracts owned by the account owner are transferred to the new owner. **TransferContacts** If true and the record is a business account, contacts associated with the account are transferred to the new owner.

Sample Code—Java

This sample creates an account, a note, an opportunity, and task for the account, and sets the owner change options so that the note, opportunity and task are transferred to the new owner along with account.

```
public void ownerChangeOptionsHeaderSample() {

    // Create account. Accounts don't transfer activities, notes, or attachments by default
```

```
    Account account = new Account();
    account.setName("Account");
    com.sforce.soap.enterprise.SaveResult[] sr = connection.create(new
com.sforce.soap.enterprise.sobject.SObject[] { account } );
    String accountId = null;

    if(sr[0].isSuccess()) {
        System.out.println("Successfully saved the account");
        accountId = sr[0].getId();

        // Create a note, a task, and an opportunity for the account

        Note note = new Note();
        note.setTitle("Note Title");
        note.setBody("Note Body");
        note.setParentId(accountId);

        Task task = new Task();
        task.setWhatId(accountId);

  Opportunity opportunity = new Opportunity();
        opportunity.setName("Opportunity");
        opportunity.setStageName("Prospecting");
        Calendar dt = connection.getServerTimestamp().getTimestamp();
        dt.add(Calendar.DAY_OF_MONTH, 7);
        opportunity.setCloseDate(dt);
        opportunity.setAccountId(accountId);

        sr = connection.create(new com.sforce.soap.enterprise.sobject.SObject[] { note,
task, opportunity } );

        if(sr[0].isSuccess()) {
           System.out.println("Successfully saved the note, task, and opportunity");


           com.sforce.soap.enterprise.QueryResult qr = connection.query("SELECT Id FROM
User WHERE FirstName = 'Jane' AND LastName = 'Doe'");
           String newOwnerId = qr.getRecords()[0].getId();
           account.setId(accountId);
           account.setOwnerId(newOwnerId);

           // Set owner change options so account's child note, task, and opportunity
transfer to new owner
        OwnerChangeOption opt1 = new OwnerChangeOption();
        opt1.setExecute(true);
        opt1.setType(OwnerChangeOptionType.TransferOwnedOpenOpportunities); // Transfer
Open opportunities owned by the account's owner

        OwnerChangeOption opt2 = new OwnerChangeOption();
        opt2.setExecute(true);
        opt2.setType(OwnerChangeOptionType.TransferOpenActivities);
```

```
        OwnerChangeOption opt3 = new OwnerChangeOption();
        opt3.setExecute(true);
        opt3.setType(OwnerChangeOptionType.TransferNotesAndAttachments);

        connection.setOnwerChangeOptions(new OwnerChangeOption[] {opt1, opt2, opt3});
           connection.update(new com.sforce.soap.enterprise.sobject.SObject[] { account }
 );

           // The account's note, task, and opportunity should be transferred to the new
owner.
        }

   } else {
       System.out.println("Account save failed: " + sr[0].getErrors().toString());
    }
}
```

PackageVersionHeader

Specifies the package version for each installed managed package.

A managed package can have several versions with different content and behavior. This header allows you to specify the version used for each package referenced by your API client.

If a package version is not specified, the API client uses the version of the package specified in Setup (enter *API* in the `Quick Find` box, then select **API**).

This header is available in API version 16.0 and later.

Associated API Calls

`convertLead()`, `create()`, `delete()`, `describeGlobal()`, `describeLayout()`, `describeSObject()`, `describeSObjects()`, `describeSoftphoneLayout()`, `describeTabs()`, `merge()`, `process()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

Element Name	Type	Description
`packageVersions`	PackageVersion[]	A list of package versions for installed managed packages referenced by your API client.

PackageVersion

Specifies a version of an installed managed package. A package version is *majorNumber.minorNumber*, for example `2.1`.

Fields

Field	Type	Description
majorNumber	int	The major version number of a package version.
minorNumber	int	The minor version number of a package version.
namespace	string	The unique namespace of the managed package.

Sample Code—Java

This sample sets the package version for one installed package in the `PackageVersionHeader`. Next, it executes the code passed into this method via the `executeAnonymous` Apex method.

```
public void PackageVersionHeaderSample(String code) throws Exception
{
    _PackageVersionHeader pvh = new _PackageVersionHeader();
    PackageVersion pv = new PackageVersion();
    pv.setNamespace("installedPackageNamespaceHere");
    pv.setMajorNumber(1);
    pv.setMinorNumber(0);
    // In this case, we are only referencing one installed package.
    PackageVersion[] pvs = new PackageVersion[]{pv};
    pvh.setPackageVersions(pvs);

    apexBinding.setHeader(new SforceServiceLocator().getServiceName().getNamespaceURI(),
        "PackageVersionHeader", pvh);
    // Execute the code passed into the method.
    ExecuteAnonymousResult r = apexBinding.executeAnonymous(code);
    if (r.isSuccess()) {
        System.out.println("Code executed successfully");
    }
    else {
        System.out.println("Exception message: " + r.getExceptionMessage());
        System.out.println("Exception stack trace: " + r.getExceptionStackTrace());
    }
}
```

QueryOptions

Specifies the preferred batch size for queries. The system sometimes creates batches that are larger or smaller than the specified size to maximize performance.

Associated API Calls

`query()`, `queryMore()`, `retrieve()`

Fields

Element Name	Type	Description
`batchSize`	int	The batch size for the number of records returned in a `query()` or `queryMore()` call. Child objects count toward the number of records for the batch size. For example, in relationship queries, multiple child objects are returned per parent row returned. The default is 500; the minimum is 200, and the maximum is 2,000. There is no guarantee that the requested batch size requested is the actual batch size; changes are sometimes made to maximize performance.

Sample Code

For code examples, see Change the Batch Size in Queries in the *Salesforce SOQL and SOSL Reference Guide*.

SessionHeader

Specifies the session ID returned from the login server after a successful `login()`. This session ID is used in all subsequent calls.

In version 12.0 and later, include the API namespace in the SOAP message associated with this header. The namespace is defined in the enterprise or partner WSDL.

API Calls

All calls, including utility calls.

Fields

Element Name	Type	Description
`sessionId`	string	Session ID returned by the `login()` call to be used for subsequent call authentication.

Sample Code

See the examples provided for `login()`.

UserTerritoryDeleteHeader

Specify a user to whom open opportunities are assigned when the current owner is removed from a territory. If this header is not used or the value of its element is null, the opportunities are transferred to the forecast manager in the territory above, if one exists. If one does not exist, the user being removed from the territory keeps the opportunities.

API Calls

`delete()`

Fields

Element Name	Type	Description
`transferToUserId`	ID	The ID of the user to whom open opportunities in that user's territory will be assigned when an opportunity's owner (user) is removed from a territory.

SEE ALSO:

Opportunity Forecast Override Business Rules

USING THE API WITH SALESFORCE FEATURES

CHAPTER 13 Implementation Considerations

In this chapter ...

Before you build an integration application or other client application, consider the data management, use limits, and communication issues explained in this section.

Choosing a User for an Integration

When your client application connects to the API, it must first log in. You must specify a user to log in to Salesforce when calling `login()`. Client applications run with the permissions and sharing of the logged-in user. The following sections include information that help you to decide how to configure a user for your client application.

Permissions

An organization's Salesforce administrator controls the availability of various features and views by configuring profiles and permission sets, and assigning users to them. To access the API (to issue calls and receive the call results), a user must be granted the "API Enabled" permission. Client applications can query or update only those objects and fields to which they have access via the permissions of the logged-in user.

If the client application logs in as a user who has access to data via a sharing rule, then the API must issue an extra query to check access. To avoid this, log in as a user with the "Modify All Data" permission. This can speed up the call response time. If providing the "Modify All Data" permission is too permissive for a particular user, consider using the "Modify All" object-level permission to restrict data access on an object basis. For more information on permissions, see Factors that Affect Data Access.

Limits

There is a limit on the number of queries that a user can execute concurrently. A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.

Multiple client applications can log in using the same `username` argument. However, this approach increases your risk of getting errors due to query limits.

If multiple client applications are logged in using the same user, they all share the same session. If one of the client applications calls `logout()`, it invalidates the session for all the client applications. Using a different user for each client application makes it easier to avoid these limits.

Note: In addition to user limits, there are limits for API requests for each organization. For more information, see API Usage Metering.

Login Server URL

The SOAP implementation of the API also provides a single login server. You can log in to any organization via a single entry point, without having to hard-code the instance for your organization. To access an organization via the API, you must first authenticate the session by sending a `login()` request to the login server at one of the following URLs, depending on your choice of WSDL.

- `https://login.salesforce.com/services/Soap/c/43.0` (enterprise WSDL)
- `https://login.salesforce.com/services/Soap/u/43.0` (partner WSDL)

The less secure version of each URL is also supported.

```
http://login.salesforce.com/services/Soap/c/43.0
```

- `http://login.salesforce.com/services/Soap/c/43.0` (enterprise WSDL)
- `http://login.salesforce.com/services/Soap/u/43.0` (partner WSDL)

The less secure version of the URL is supported, but not recommended. It is helpful for debugging through proxy servers.

All subsequent calls to the server during the session should be made to the URL returned in the `login()` response, which points to the server instance for your organization.

Log in to the Login Server

Before invoking any other calls, a client application must first invoke the `login()` call to establish a session with the login server, set the returned server URL as the target server for subsequent API requests, and set the returned session ID in the SOAP header to provide server authorization for subsequent API requests. For more information, see `login()` and Step 4: Walk Through the Sample Code.

Salesforce checks the IP address from which the client application is logging in, and blocks logins from unknown IP addresses. For a blocked login via the API, Salesforce returns a login fault. Then, the user must add their security token to the end of their password in order to log in. A security token is an automatically-generated key from Salesforce. For example, if a user's password is *mypassword*, and their security token is *XXXXXXXXXX*, then the user must enter *mypasswordXXXXXXXXXX* to log in. Users can obtain their security token by changing their password or resetting their security token via the Salesforce user interface. When a user changes their password or resets their security token, Salesforce sends a new security token to the email address on the user's Salesforce record. The security token is valid until a user resets their security token, changes their password, or has their password reset. When the security token is invalid, the user must repeat the login process to log in. To avoid this, the administrator can make sure the client's IP address is added to the organization's list of trusted IP addresses. For more information, see Security Token.

Once you are logged in, you can issue API calls. For each operation, client applications submit a synchronous request to the API, await the response, and process the results. The API commits any changed data automatically.

API calls:

- Core Calls
- Describe Calls
- Utility Calls

Typical API Call Sequence

For each call, your client application typically:

1. Prepares the request by defining request parameters, if applicable.
2. Invokes the call, which passes the request with its parameters to the Lightning Platform Web Service for processing.
3. Receives the response from the API.
4. Handles the response, either by processing the returned data (for a successful invocation) or by handling the error (for a failed invocation).

Salesforce Sandbox

Professional, Enterprise, Unlimited, and Performance Edition customers have access to the Salesforce Sandbox, which is a testing environment that offers a full or partial copy of your Salesforce org's live production data. For more information about Salesforce Sandbox, visit the Salesforce.com Community website at www.salesforce.com/community or see "Sandbox Types and Templates" in the Salesforce Help.

To access your org's Salesforce Sandbox via the API, use the following URLs to make login requests.

- `https://test.salesforce.com/services/Soap/c/43.0` (enterprise WSDL)
- `https://test.salesforce.com/services/Soap/u/43.0` (partner WSDL)

Multiple Instances of Salesforce Database Servers

provides many database server instances. Although orgs are generally allocated by geographic regions, an org may be on any instance.

Content Type Requirement

In the API version 7.0 and later, all requests must contain a correct content type HTTP header, for example: `Content-Type: text/xml; charset=utf-8`. Earlier versions of the API do not enforce this requirement.

Monitoring API Traffic

You can monitor the number of API requests generated by your org in two ways.

- Any user can see the number of API requests sent in the last 24 hours. To view the information, from Setup, enter *`Company Information`* in the `Quick Find` box, then select **Company Information**. Look for the "API Requests, Last 24 Hours" field in the right column.
- If a user has the "Modify All Data" permission, the user can view a report of the API requests sent for the last seven days. To view the information, click the Reports tab, scroll to the **Administrative Reports** section and click the **API Usage Last 7 Days** link. Users can sort the report by any of the fields listed in the **Summarize Information by:** drop-down list. For more information about sorting, filtering, or customizing reports, see the Salesforce online help for reports.

API Usage Metering

To maintain optimum performance and ensure that the Lightning Platform API is available to all our customers, Salesforce balances transaction loads by imposing two types of limits:

- Concurrent API Request Limits
- Total API Request Allocations

When a call exceeds a request limit, an error is returned.

Concurrent API Request Limits

The following table lists the limits for various types of organizations for concurrent requests (calls) with a duration of 20 seconds or longer:

Org Type	Limit
Developer Edition and Trial orgs	5
Production orgs and Sandbox	25

Total API Request Allocations

The following table lists the limits for the total API requests (calls) per 24-hour period for an org.

Salesforce Edition	API Calls Per License Type	Total Calls Per 24-Hour Period
Developer Edition	N/A	15,000
• Enterprise Edition • Professional Edition with API access enabled	• Salesforce: 1,000 • Salesforce Platform: 1,000 • Force.com - One App: 200 • Customer Community: 0 • Customer Community Login: 0 • Customer Community Plus: 200 • Customer Community Plus Login: 10 • Partner Community: 200 • Partner Community Login: 10 • Lightning Platform Starter: 200 per member for Enterprise Edition orgs • Lightning Platform Plus: 1000 per member for Enterprise Edition orgs	15,000 + (number of licenses X calls per license type), up to a maximum of 1,000,000
• Unlimited Edition • Performance Edition	• Salesforce: 5,000 • Salesforce Platform: 5,000 • Force.com - One App: 200 • Customer Community: 0 • Customer Community Login: 0 • Customer Community Plus: 200 • Customer Community Plus Login: 10 • Partner Community: 200 • Partner Community Login: 10 • Lightning Platform Starter: 200 per member for Unlimited and Performance Edition orgs • Lightning Platform Plus: 5000 per member for Unlimited and Performance Edition orgs	15,000 + (number of licenses X calls per license type)
Sandbox	N/A	5,000,000

Limits are enforced against the aggregate of all API calls made by the org in a 24 hour period. Limits are not on a per-user basis. When an org exceeds a limit, all users in the org can be temporarily blocked from making additional calls. Calls are blocked until usage for the preceding 24 hours drops below the limit.

Note: Allocations are automatically enforced for all editions.

Any action that sends a call to the API counts toward usage amounts, except the following:

- Outbound messages

- Apex callouts

You can create an API usage metering notification, so that Salesforce will send an email to a designated user when API limits have exceeded a specified limit in a specified time period. For more information, see “API Usage Notifications” in the Salesforce online help.

There are also limits on the number of requests allowed per org from the Salesforce user interface. For details, see “Concurrent Usage Limits” in the Salesforce online help.

Example API Usage Metering Calculations

The following examples illustrate API usage metering calculations for several scenarios:

- For an Enterprise Edition organization with fifteen Salesforce licenses, the request limit is 15,000 requests (15 licenses X 1,000 calls).
- For an Enterprise Edition organization with 15,000 Salesforce licenses, the request limit is 1,000,000 (the number of licenses X 1,000 calls is greater than the maximum value, so the lower limit of 1,000,000 is used).
- For a Developer Edition organization that made 14,500 calls at 5:00 AM Wednesday, 499 calls at 11:00 PM Wednesday, only one more call could successfully be made until 5:00 AM Thursday.
- For an Enterprise Edition organization with 60 Gold Partner licenses, the request limit is 15,000 (the number of licenses X 200 calls is less than the minimum value of 15,000).

Increasing Total API Request Limit

The calculation of the API request limit based on user licenses is designed to allow sufficient capacity for your organization based on your number of users. If you need a higher limit and you don't want to purchase additional user licenses or upgrade to Performance Edition, you can purchase additional API calls. For more information, contact your account representative.

Before you purchase additional API calls, you should perform a due diligence of your current API usage. Client applications, whether it is your own enterprise applications or partner applications, that make calls to the API can often be optimized to use fewer API calls to do the same work. If you are using a partner product, you should consult with the vendor to verify that the product is making optimal use of the API. A product that makes inefficient use of the API will incur unnecessary cost for your organization.

Compression

The API allows the use of compression on the request and the response, using the standards defined by the HTTP 1.1 specification. This is automatically supported by some SOAP/WSDL clients, and can be manually added to others. Visit `https://developer.salesforce.com/page/Tools` for more information on particular clients.

Compression is not used unless the client specifically indicates that it supports compression. For better performance, we suggest that clients accept and support compression as defined by the HTTP 1.1 specification.

To indicate that the client supports compression, you should include the HTTP header “Accept-Encoding: gzip, deflate” or a similar heading. The API compresses the response if the client properly specifies this header. The response includes the header “Content-Encoding: deflate” or “Content-Encoding: gzip,” as appropriate. You can also compress any request by including a “Content-Encoding: deflate” or “gzip” header.

Most clients are partially constrained by their network connection, even on a corporate LAN. The API allows the use of compression to improve performance. Almost all clients can benefit from response compression, and many clients may benefit from compression of requests as well. The API supports deflate and gzip compression according the HTTP 1.1 specification.

Response Compression

The API can optionally compress responses. Responses are compressed only if the client sends an Accept-Encoding header with either gzip or deflate compression specified. The API is not required to compress the response even if you have specified Accept-Encoding, but it normally does. If the API compresses the response, it also specifies a Content-Encoding header with the name of the compression algorithm used, either gzip or deflate.

Request Compression

Clients can also compress requests. The API decompresses any requests before processing. The client must send up a Content-Encoding HTTP header with the name of the appropriate compression algorithm. For more information, see:

- Content-Encoding at: `www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.11`
- Accept-Encoding at: `www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.3`
- Content Codings at: `www.w3.org/Protocols/rfc2616/rfc2616-sec3.html#sec3.5`

Note: To implement request SOAP compression in a Java client with WSC (Web Service Connector), call `setCompression()` on the `Config` you use to instantiate a `Connection` object with. For an example, see `login()` sample on page 2707 code.

HTTP Persistent Connections

Most clients achieve better performance if they use HTTP 1.1 persistent connection to reuse the socket connection for multiple requests. Persistent connections are normally handled by your SOAP/WSDL client automatically. For more details, see the HTTP 1.1 specification at:

`http://www.w3.org/Protocols/rfc2616/rfc2616-sec8.html#sec8.1`

HTTP Chunking

Clients that use HTTP 1.1 may receive chunked responses. Chunking is normally handled by your SOAP/WSDL client automatically.

Internationalization and Character Sets

The API supports either full Unicode characters or ISO-8859-1 characters. The character set for your organization depends on the Salesforce instance your organization uses. If your organization logs into `ssl.salesforce.com`, then your encoding is `ISO-8859-1`. All other instances use `UTF-8`. You can determine the character set for your organization by calling `describeGlobal()` and inspecting the `encoding` value returned in the DescribeGlobalResult.

If your organization uses ISO-8859-1 encoding, then all data sent to the API must be encoded in ISO-8859-1. Characters outside the valid ISO-8859-1 range might be truncated or cause an error.

Note: The API response is encoded in the character set used by your organization (UTF-8 or ISO-8859-1). Either way, the encoded data is usually handled for you by the SOAP client.

XML Compliance

The API is based on XML, which requires all documents to be well formed. Part of that requirement is that certain Unicode characters are not allowed in an XML document, even in an escaped form, and that others must be encoded according to their location. Normally this is handled for you by any standard SOAP or XML client. Clients must be able to parse any normal XML escape sequence, and must not pass up invalid XML characters.

Some characters, as mentioned, are illegal even if they are escaped. The illegal characters include unpaired Unicode surrogates and a few other Unicode characters. All are seldom-used control characters that are usually not important in any data, and tend to cause problems with many programs. Although they are not allowed in XML documents, they are allowed in HTML documents and may be present in Salesforce data. The illegal characters will be stripped from any API response.

Illegal characters:

- `0xFFFE`
- `0xFFFF`
- Control characters `0x0 - 0x19`, except the following characters, which are legal: `0x9`, `0xA`, `0xD`, tab, newline, and carriage return)
- `0xD800 - 0xDFFF`, unless they're used to form a surrogate pair

For UTF-8 encoding, Salesforce supports only the basic UCS-2 encoding (two byte, Basic Multilingual Plane), and does not support any of the extended UCS-4 characters. UCS-4 support is extremely rare in any system. UCS-2 is the encoding that Java and Windows support. For more information about XML characters and character sets, see: `http://www.w3.org/TR/REC-xml#charsets`.

.NET, Non-String Fields, and the Enterprise WSDL

If you use .NET with the enterprise WSDL, .NET generates a Boolean field for each non-string field. For example, if you have a date value in `MyDateField__c`, .NET generates a Boolean field called `MyDateField__cSpecified`.

The generated field value is `false` by default. If a Specified field value is `false`, then the values in the corresponding original field are not be included in the SOAP message. For example, before the values in the currency field `annualRevenue` can be included in a SOAP message generated by your client application, the value of `annualRevenueSpecified` must be set to `true`.

```
account.annualRevenue = 10000;
account.annualRevenueSpecified = true;
```

CHAPTER 14 Outbound Messaging

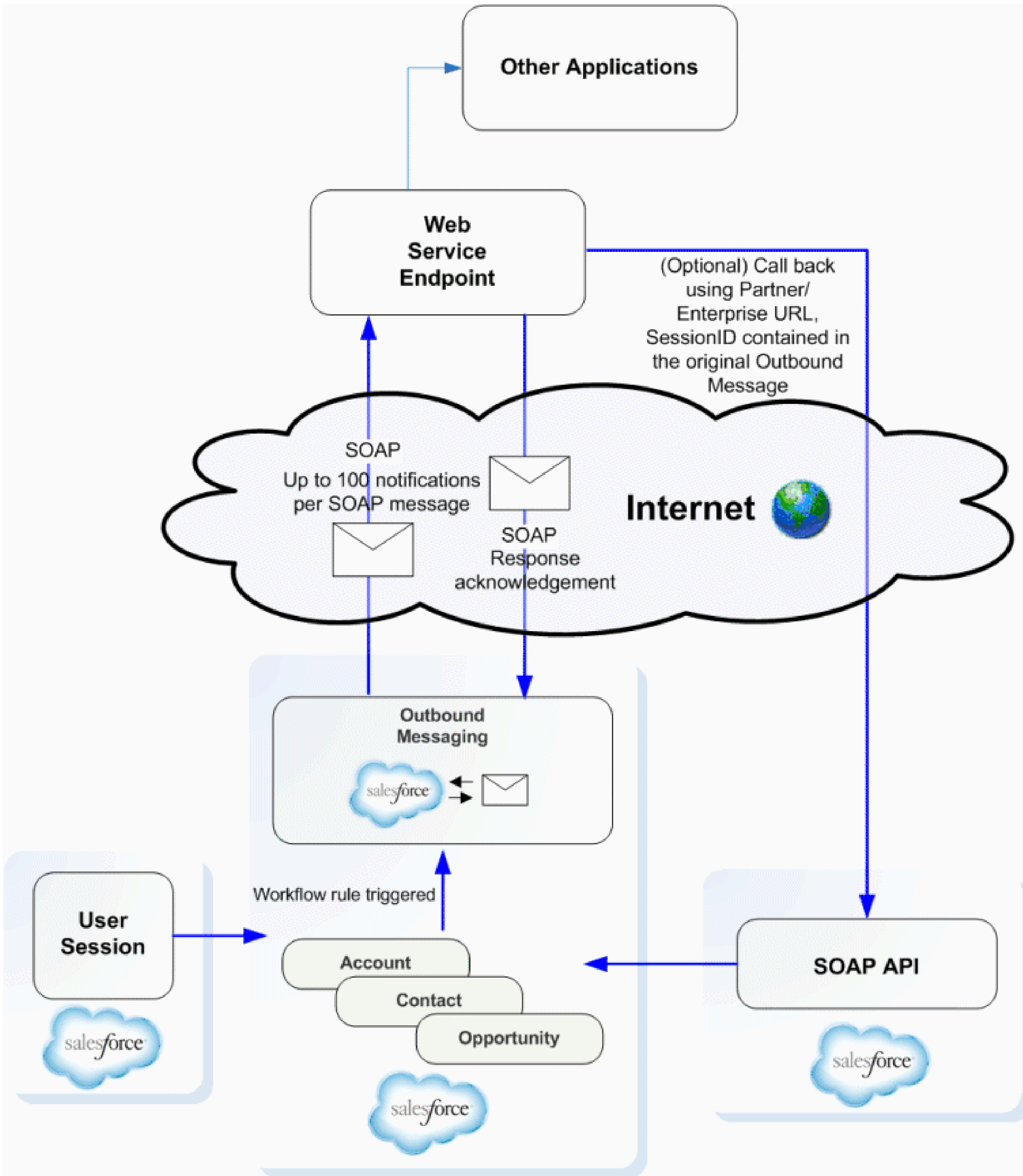
In this chapter ...

Outbound messaging allows you to specify that changes to fields within Salesforce can cause messages with field values to be sent to designated external servers.

Outbound messaging is part of the workflow rule functionality in Salesforce. Workflow rules watch for specific kinds of field changes and trigger automatic Salesforce actions, such as sending email alerts, creating task records, or sending an outbound message.

Understanding Outbound Messaging

Outbound messaging uses the `notifications()` call to send SOAP messages over HTTP(S) to a designated endpoint when triggered by a workflow rule.



After you set up outbound messaging, when a triggering event occurs, a message is sent to the specified endpoint URL. The message contains the fields specified when you created the outbound message. Once the endpoint URL receives the message, it can take the information from the message and process it. To do that, you need to examine the outbound messaging WSDL.

Understanding Notifications

A single SOAP message can include up to 100 notifications. Each notification contains the object ID and a reference to the associated sObject data. Note that if the information in the object changes after the notification is queued but before it is sent, only the updated information will be delivered.

If you issue multiple discrete calls, the calls may be batched together into one or more SOAP messages.

Messages will be queued locally. A separate background process performs the actual sending, to preserve message reliability:

- If the endpoint is unavailable, messages will stay in the queue until sent successfully, or until they are 24 hours old. After 24 hours, messages are dropped from the queue.
- If a message cannot be delivered, the interval between retries increases exponentially, up to a maximum of two hours between retries.
- Messages are retried independent of their order in the queue. This may result in messages being delivered out of order.
- You cannot build an audit trail using outbound messaging. While each message should be delivered at least once, it may be delivered more than once. Also, it may not be delivered at all if delivery cannot be done within 24 hours. Finally, as noted above, the source object may change after a notification is queued but before it is sent, so the endpoint will only receive the latest data, not any intermediate changes.
- Because a message may be delivered more than once, your listener client should check the notification IDs delivered in the notification before processing.

Note: Instead of polling, which was required in previous releases, you can now use outbound messaging to trigger execution logic when Salesforce raises an event. In previous versions of the API, client applications had to poll Salesforce to find out if relevant changes had occurred. Because most changes eventually trigger workflow if a rule exists for it, you can use this to trigger actions based on Salesforce events.

The metadata needed for outbound messaging, including the definition of the `notifications()` call, which sends the outbound SOAP message to an external service, is in a separate WSDL. The WSDL is created and available from the Salesforce user interface once a workflow rule has been associated with an outbound message. The WSDL is bound to the outbound message and contains the instructions about how to reach the endpoint service and what data is sent to it. For more information about setting up outbound messaging, see Defining Outbound Messaging.

Setting Up Outbound Messaging

Before you can use outbound messaging, you must set it up via the Salesforce user interface.

- Setting Up User Profiles
- Defining Outbound Messaging
- Downloading the Salesforce Client Certificate
- Viewing Outbound Messages
- Tracking Outbound Message Status

Setting Up User Profiles

It's possible to create circular changes with outbound messaging. For example, if a user is performing integrations that trigger workflow, and the workflow actions trigger account updates, those account updates trigger new workflow, and so on. To prevent these circular changes, you can disable a user's ability to send outbound messages.

Here's another example of a circular change scenario.

1. You configure an outbound message to include a `sessionId` and specify a user in the **User to send as** field. The user doesn't have outbound messaging disabled.
2. A change in a contact record triggers an outbound message from the specified user, with the `sessionId` to your outbound message listener.
3. Your outbound message listener calls the Lightning Platform API and updates the same contact record which triggered the outbound message.
4. The update triggers an outbound message.
5. Your outbound message listener updates the record.
6. The update triggers an outbound message.
7. Your outbound message listener updates the record.

To disable outbound message notifications for a user, deselect **Send Outbound Messages** in the user's Profile. We recommend specifying a single user to respond to outbound messages and disabling this user's ability to send outbound messages.

Defining Outbound Messaging

To define outbound messages, use this procedure in the Salesforce user interface:

1. From Setup, enter *`Outbound Messages`* in the `Quick Find` box, then select **Outbound Messages**.
2. Click **New Outbound Message**.
3. Choose the object that has the information you want included in the outbound message, and click **Next**.
4. Configure the outbound message.
   a. Enter a name and description for this outbound message.
   b. Enter an endpoint URL for the recipient of the message. Salesforce sends a SOAP message to this endpoint.

      For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:

      - 80: This port only accepts HTTP connections.
      - 443: This port only accepts HTTPS connections.
      - 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.

   c. Select the Salesforce user to use when sending the message by specifying a username in the **User to send as** field. The chosen user controls data visibility for the message that is sent to the endpoint.
   d. Select **Include Session ID** if you want a `sessionId` to be included in the outbound message. Include the `sessionId` in your message if you intend to make API calls back to Salesforce from your listener. The `sessionId` represents the user defined in the previous step and not the user who triggered the workflow.
   e. Select the fields you want included in the outbound message and click **Add**.
5. Click **Save**, and review the outbound message detail page:

- The `API Version` field is automatically generated and set to the current API version when the outbound message was created. This API version is used in API calls back to Salesforce using the enterprise or partner WSDL. The `API Version` can only be modified by using the Metadata API.
- Click **Click for WSDL** to view the WSDL associated with this message.

  The WSDL is bound to the outbound message and contains the instructions about how to reach the endpoint service and what data is sent to it.

Note: If you don't have these options, your org doesn't have outbound messaging enabled. Contact Salesforce to enable outbound messaging for your org.

Downloading the Salesforce Client Certificate

Your application (endpoint) server's SSL/TLS may be configured to require client certificates (two-way SSL/TLS), in order to validate the identity of the Salesforce server when it takes the role of client to your server. If this is the case, you can download the Salesforce client certificate from the Salesforce application user interface. This is the client certificate that Salesforce sends with each outbound message for authentication.

1. From Setup, enter *`API`* in the `Quick Find` box, then select **API**.
2. On the API WSDL page, click **Manage API Client Certificate**.
3. On the Certificate and Key Management page, in the API Client Certificate section, click the **API Client Certificate**.
4. On the Certificates page, click **Download Certificate**. The .crt file is saved in the download location specified in your browser.

   Import the downloaded certificate into your application server, and configure your application server to request the client certificate. The application server then checks that the certificate used in the SSL/TLS handshake matches the one you downloaded.

Note: Your application (endpoint) server must send any intermediate certificates in the certificate chain, and the certificate chain must be in the correct order. The correct order is:

1. Server certificate
2. Intermediate certificate that signed the server certificate if the server certificate wasn't signed directly by a root certificate
3. Intermediate certificate that signed the certificate in step 2
4. Any remaining intermediate certificates

   Don't include the root certificate authority certificate. The root certificate isn't sent by your server. Salesforce already has its own list of trusted certificates on file, and a certificate in the chain must be signed by one of those root certificate authority certificates.

Viewing Outbound Messages

To view existing outbound messages, from Setup, enter *`Outbound Messages`* in the `Quick Find` box, then select **Outbound Messages** in the Salesforce user interface.

- Click **New Outbound Message** to define a new outbound message.
- Click **View Message Delivery Status** to track the status of an outbound message.
- Select an existing outbound message to view details about it or view workflow rules and approval processes that use it.
- Click **Edit** to make changes to an existing outbound message.
- Click **Del** to delete an outbound message.

Tracking Outbound Message Status

To track the status of an outbound message, from Setup, enter *`Outbound Messages`* in the `Quick Find` box, select **Outbound Messages**, and then click **View Message Delivery Status**. You can perform several tasks on this page.

- View the status of your outbound messages, including the total number of attempted deliveries.
- View the action that triggered the outbound message by clicking any workflow or approval process action ID.
- Click **Retry** to change the **Next Attempt** date to now. This action causes the message delivery to be immediately retried.
- Click **Del** to permanently remove the outbound message from the queue.

Considerations for Security

To use outbound messaging, ensure that no third party can send messages to the endpoint while pretending to be from Salesforce:

- Lock down the client application's listener to accept requests only from Salesforce IP ranges. While this action guarantees that the message came from Salesforce, it does not guarantee that another customer is not pointing to your endpoint and sending messages. For an up-to-date list of Salesforce IP ranges, see What are the Salesforce IP Addresses to whitelist?
- Use SSL/TLS. Using SSL/TLS provides confidentiality while data is transported across the internet. Without it, a malicious third party can eavesdrop on your data. This issue is especially important if you pass data with privacy requirements and you pass a `SessionId` with the message. Also, we authenticate the certificate presented on connection, ensure that it is from a valid Certificate Authority, and check that the domain in the certificate matches the one Salesforce is trying to connect. This prevents us from communicating with the wrong endpoint.
- If the configuration of your application (endpoint) server's SSL/TLS allows, validate the identity of the Salesforce server when it takes the role of a client to your server, using the Salesforce client certificate. For instructions to download the certificate, see Downloading the Salesforce Client Certificate.
- The organization `Id` is included in each message (see ID Field Type for more information about the Id field type). Your client application should validate that messages contain your organization `Id`.

Understanding the Outbound Messaging WSDL

The rest of this topic examines relevant sections of the outbound messaging WSDL. Your WSDL may differ, depending on the choices you made when you set up outbound messaging for a particular event on a particular object.

`notifications()`

This section defines the `notifications()` call, which creates an outbound message containing specified fields and values for a particular object or objects, and sends the values to a specified endpoint URL:

```
        <schema elementFormDefault="qualified" xmlns="http://www.w3.org/2001/XMLSchema"
         targetNamespace="http://soap.sforce.com/2005/09/outbound">
            <import namespace="urn:enterprise.soap.sforce.com" />
            <import namespace="urn:sobject.enterprise.soap.sforce.com" />

            <element name="notifications">
                <complexType>
                    <sequence>
                        <element name="OrganizationId" type="ent:ID" />
                        <element name="ActionId" type="ent:ID" />
```

```
                        <element name="SessionId" type="xsd:string" nillable="true" />
                        <element name="EnterpriseUrl" type="xsd:string" />
                        <element name="PartnerUrl" type="xsd:string" />
                        <element name="Notification" maxOccurs="100"
                          type="tns:OpportunityNotification" />
                    </sequence>
                </complexType>
            </element>
        </schema>
```

Use this table to understand the elements named in the notifications method definition:

Name	Type	Description
OrganizationId	ID	ID of the organization sending the message.
ActionId	string	The workflow rule (action) that triggers the message.
SessionId	string	Optional, a session ID to be used by endpoint URL client that is responding to the outbound message. It is used by the receiving code to make calls back to Salesforce.
EnterpriseURL	string	URL to use to make API calls back to Salesforce using the enterprise WSDL.
PartnerURL	string	URL to use to make API calls back to Salesforce using the partner WSDL.
Notification	Notification	Defined in the next section, contains the object datatype and its `Id`, for example OpportunityNotification or ContactNotification.

The Notification datatype is defined in the WSDL. In the following example, a Notification for opportunities is defined, based on the Notification entry of the `notifications()` call definition:

```
            <complexType name="OpportunityNotification">
                <sequence>
                    <element name="Id" type="ent:ID" />
                    <element name="sObject" type="ens:Opportunity" />
                </sequence>
            </complexType>
```

Each object element (in our example, opportunities) contains the subset of the fields that you selected when you created the outbound message. Each message Notification also has the object ID, and this needs to be used to track redelivery attempts of notifications you've already processed.

notificationsResponse

This element is the schema for sending an acknowledgement (ack) response to Salesforce.

```
            <element name="notificationsResponse">
                <complexType>
                    <sequence>
                        <element name="Ack" type="xsd:boolean" />
                    </sequence>
                </complexType>
            </element> //This section is the last in the types definition section.
```

You acknowledge all notifications in the message if there is more than one.

Building a Listener

Once you have defined an outbound message and configured an outbound messaging endpoint, download the WSDL and create a listener:

1. Right-click **Click for WSDL** and select Save As to save the WSDL to a local directory with an appropriate file name. For example, for an outbound message that deals with leads, you could name the WSDL file `leads.wsdl`.
2. Unlike the enterprise or partner WSDLs, which describe the messages the client sends to Salesforce, this WSDL defines the messages that Salesforce will send to your client application.
3. Most Web services tools will generate stub listeners for you, in much the same way as they generate a client stub for the enterprise or partner WSDL. Look for a server side stub option.

   For example, for .Net 2.0:

   a. Run `wsdl.exe /serverInterface leads.wsdl` with .Net 2.0. This generates `NotificationServiceInterfaces.cs`, which defines the notification interface.
   b. Create a class that implements `NotificationServiceInterfaces.cs`.
   c. You implement your listener by writing a class that implements this interface. There are a number of ways to do this. One simple way is to compile the interface to a DLL first (DLLs need to be in the `bin` directory in ASP.NET).

   ```
   mkdir bin
   csc /t:library /out:bin\nsi.dll NotificationServiceInterfaces.cs
   ```

   Now write an ASMX based Web service that implements this interface. For example, in `MyNotificationListener.asmx`:

   ```
   <%@WebService class="MyNotificationListener" language="C#"%>
   class MyNotificationListener : INotificationBinding
   {            public notificationsResponse notifications(notifications n)
                {
                       notificationsResponse r = new notificationsResponse();
                       r.Ack = true;
                       return r;
                }
   }
   ```

   This example is a simple implementation, actual implementations will be more complex.

   d. Deploy the service by creating a new virtual directory in IIS for the directory that contains the `MyNotificationListener.asmx`.
   e. You can now test that the service is deployed by viewing the service page with a browser. For example, if you create a virtual directory `salesforce`, you'd go to `http://localhost/salesforce/MyNotificationListener.asmx`.

   The process for other Web service tools is similar, please consult the documentation for your Web service tool.

Your listener must meet these requirements:

- Must be reachable from the public Internet.
- For security reasons, Salesforce restricts the outbound ports you can specify to one of the following:
  - 80: This port only accepts HTTP connections.
  - 443: This port only accepts HTTPS connections.

  - 1024–66535 (inclusive): These ports accept HTTP or HTTPS connections.

- To be valid, the common name (CN) of the certificate must match the domain name for your endpoint's server, and the certificate must be issued by a Certificate Authority trusted by Java 2 Platform, Standard Edition (J2SE) 5.0 (JDK 1.5).
- If your certificate expires, message delivery will fail.

Warning: To avoid an infinite loop of outbound messages that trigger changes that trigger more outbound messages, the user who updates the objects should **not** have the “Send Outbound Messages” permission.

CHAPTER 15 Data Loading and Integration

In this chapter ...

If you need to load large volumes of data (hundreds of thousands to millions of records), there are a number of factors you must consider. Use the topics in this section to become familiar with issues of choosing an API, client application design, organization configuration, and data loader best practices.

Choosing the Right API

The first decision that you must make is which API to use for your data loading process.

SOAP API

Use SOAP API to create, retrieve, update or delete records, such as accounts, leads, and custom objects. With more than 20 different calls, SOAP API also allows you to maintain passwords, perform searches, and much more. Use SOAP API in any language that supports Web services.

REST API

REST API provides a powerful, convenient, and simple REST-based web services interface for interacting with Salesforce. Its advantages include ease of integration and development, and it's an excellent choice of technology for use with mobile applications and web projects. For certain projects, you may want to use REST API with other Salesforce REST APIs. To build UI for creating, reading, updating, and deleting records, including building UI for list views, actions, and dependent picklists, use User Interface API. To build UI for Chatter, communities, or recommendations, use Chatter REST API. If you have many records to process, consider using Bulk API, which is based on REST principles and optimized for large sets of data.

Bulk API

Bulk API is based on REST principles and is optimized for loading or deleting large sets of data. You can use it to query, queryAll, insert, update, upsert, or delete many records asynchronously by submitting batches. Salesforce processes batches in the background.

SOAP API, in contrast, is optimized for real-time client applications that update a few records at a time. You can use SOAP API for processing many records, but when the data sets contain hundreds of thousands of records, SOAP API is less practical. Bulk API is designed to make it simple to process data from a few thousand to millions of records.

Client Application Design

Although the Bulk API is the best choice for loading large numbers of records, you can also use the SOAP-based API. There are many ways you can design your application to improve the speed of data loads:

- **Use persistent connections.** Opening a socket takes time, mostly when opening a socket stems from the SSL/TLS negotiation. Without SSL or TLS, the API request would not be secure. Included in the HTTP 1.1 specification is support for reusing sockets among requests (persistent connections) instead of having to re-open a socket per request as in HTTP 1.0. Whether your client supports persistent connections depends on the SOAP stack you are using. By default, .NET uses persistent connections. If you change the configuration to use the Apache http-commons libraries, your client will be compliant with the HTTP 1.1 specification and use persistent connections.

  For information about HTTP 1.1, see HTTP Persistent Connections and `http://www.w3.org/Protocols/rfc2616/rfc2616-sec8.html#sec8.1`.

- **Minimize the number of requests.** There is some processing associated with each request, so to save time your client should batch as many records per request as possible. Set `batchSize` to the limit of 2,000. If that is not the most efficient batch size, the API will change it. For more information about setting batch sizes, see QueryOptions.
- **Minimize the size of the requests.** Your client application should send as many records per request as possible, but it should also send as small a request as possible to reduce network transmission time. To minimize the request size, use compression on both the request and the response. Gzip is the most popular type of compression, and there are multiple posts on the community boards

at the Lightning Platform Developer Boards that describe how to implement compression with different SOAP stacks. The full Gzip analysis and discussion is available at Simon Fell's blog: `http://www.pocketsoap.com/weblog/2005/12/1583.html`.

- **Do Not Design a Multi-Threaded Client Application.** Multi-threading is not allowed for a single client application using the SOAP-based API.

Salesforce Settings

Most processing takes place in the database. Setting these parameters correctly will help the database process as quickly as possible:

- **Enable or Disable the Most Recently Used (MRU) functionality.** Records marked as most recently used (MRU) are listed in the "Recent Items" section of the sidebar in the Salesforce user interface. Check that you are not enabling it for calls where it is not needed.

  In API version 7.0 and above, MRU functionality is disabled by default. To enable the MRU functionality, create this header and set the `updateMru` to `true`. The following sample shows how to use MRU functionality:

  ```
  public void mruHeaderSample() {
    connection.setMruHeader(true);
    Account account = new Account();
    account.setName("This will be in the MRU");
    try {
      SaveResult[] sr = connection.create(new SObject[]{account});
      System.out.println("ID of account added to MRU: " +
        sr[0].getId());
    } catch (ConnectionException ce) {
      ce.printStackTrace();
    }
  }
  ```

- **Log in as a user with the "Modify All Data" permission to avoid sharing rules.** If the client application logs in as a user who has access to data via a sharing rule, then the API must issue an extra query to check access. To avoid this, log in as a user with the "Modify All Data" permission. In general, fewer sharing rules quickens load speeds, as there are fewer operations that have to be performed when setting properties such as ownership.

  Alternatively, you can set organization-wide defaults for some objects as public read/write for the duration of the load. For more information, see "Set Your Organization-Wide Sharing Defaults" in the Salesforce online help.

- **Avoid workflow or assignment rules.** Anything that causes a post-operation action slows down the load. You can temporarily disable automatic rules if the loaded objects are exempt from them.
- **Avoid triggering cascading updates.** For example, if you update the owner of an account, the contacts and opportunities associated with that account may also require updates. Instead of updating a single object, the client application must access multiple objects, which slows down the load.

The Lightning Platform Data Loader is a good reference for data loading. It disables the MRU, uses HTTP/1.1 persistent connections, and applies GZIP compression on the request and response. If you are performing a data load, or are looking at a place to start when writing your own Java integration, the Lightning Platform Data Loader can serve as a fast and reliable solution. For more information about the Lightning Platform Data Loader, see: Data Loader in the Salesforce online help.

Best Practices with Any Data Loader

While this section presents a best practice process using the Lightning Platform Data Loader, the general principles apply to any client data loader:

1. Identify which data you will migrate.

   You may not want or need to migrate a whole set of data—choose which objects you wish to migrate. For example, you may want to migrate only the contact information from each account, or only migrate account information from a particular division.

2. Create templates for the data.

   Create one template for each object, for example in an Excel worksheet.

   Identify the required fields for each object. In addition to the required fields for each standard object, there may be additional required fields such as those needed to follow business rules, or legacy ID fields. Use this guide or see the page layout definitions in the Salesforce user interface to find out which fields are required on standard objects.

   You may wish to highlight the required fields in red for easier review of the data after you populate the templates.

   You should also identify any ordering dependencies. Objects may have mandatory relationships, for example all accounts have an owner, and all opportunities are associated with an account. The dependencies in these relationships dictate the order of data migration. For Salesforce data, for example, you should load users first, then accounts, then opportunities.

   To identify dependencies, review the related lists and lookup fields in the page layout of the given object, and IDs (foreign keys) in the database.

3. Populate the templates.

   Clean your data before populating the template, and review the data in the templates.

4. Migrate the data.

   Create custom fields to store legacy ID information. Optionally, give the custom field the `External ID` attribute so it will be indexed. This will help maintain relationships, and help you build custom reports for validation.

   Load one record, check the results, then load all records.

5. Validate the data.

   Use all of these techniques to validate your migration:

   - Create custom reports that validate record counts and provide an overall snapshot of migration.
   - Spot check the data.
   - Review exception reports to see what data was not migrated.

6. Re-migrate or update data as needed.

Integration and Single Sign-On

Warning: To avoid getting into an unrecoverable state, do not enable single sign-on for your system administrator account. If you do, and then perform a single sign-on integration that fails, you may not be able to log in again to recover.

CHAPTER 16 Data Replication

In this chapter ...

The API supports data replication, which allows you to store and maintain a local, separate copy of your organization's pertinent Salesforce data for specialized uses, such as data warehousing, data mining, custom reporting, analytics, and integration with other applications. Data replication provides you with local control and the ability to run large or ad hoc analytical queries across the entire data set without transmitting all that data across the network.

Use the topics in this section to better understand the best practices for data replication.

API Calls for Data Replication

The API supports data replication with the following API calls:

API Call	Description
`getUpdated()`	Retrieves the list of objects that have been updated (added or changed) during the specified timespan for the specified object.
`getDeleted()`	Retrieves the list of objects that have been deleted during the specified timespan for the specified object.

Client applications can invoke these API calls to determine which objects in your organization's data have been updated or deleted during a given time period. These API calls return a set of IDs for objects that have been updated (added or changed) or deleted, as well as the timestamp (Coordinated Universal Time (UTC)—not local—timezone) indicating when they were last updated or deleted. It is the responsibility of the client application to process these results and to incorporate the required changes into the local copy of the data.

Scope of Data Replication

This feature provides a mechanism that targets data replication (one-way copying of data). It does not provide data synchronization (two-way copying of data) or data mirroring capabilities.

Data Replication Steps

The following is a typical data replication procedure for an object:

1. Optionally, determine whether the structure of the object has changed since the last replication request, as described in Checking for Structural Changes in the Object.
2. Call `getUpdated()`, passing in the object and timespan for which to retrieve data.

   Note that `getUpdated()` retrieves the IDs for data to which the logged in user has access. Data that is outside of the user's sharing model is not returned. The API returns the ID of every changed object that is visible to you, regardless of what change occurred in the object. For information on IDs, see ID Field Type.
3. Pass in all IDs in an array. For each ID element in the array, call `retrieve()` to obtain the latest information you want from the associated object. You must then take the appropriate action on the local data, such as inserting new rows or updating existing ones with the latest information.
4. Call `getDeleted()`, passing in the object and timespan for which to retrieve data. Like `getUpdated()`, `getDeleted()` retrieves the IDs for data to which the logged-in user has access. Data that is outside of the user's sharing model is not returned. The API returns the ID of every changed object that is visible to you, regardless of what change occurred in the object, based on `SystemModstamp` field information if available. For information on IDs, see ID Field Type.
5. Iterate through the returned array of IDs. Your client application must then take the appropriate action on the local data to remove (or flag as deleted) the deleted objects. If your client application cannot match rows in the local data using the retrieved object ID, then the local data rows either were deleted or were never created, in which case there is nothing to do.
6. Optionally, save the request time spans for future reference. You can do this with the `getDeleted()` latestDateCovered value or the `getUpdated()` latestDateCovered value.

Object-Specific Requirements for Data Replication

The API objects have the following requirements for data replication:

- The `getUpdated()` and `getDeleted()` calls filter the results so that the client application receives IDs for only those created or updated objects to which the logged-in user has access. For information on IDs, see ID Field Type.
- Your client application can replicate any objects to which it has sufficient permissions. For example, to replicate all data for your organization, your client application must be logged in with the “View All Data” permission. For more information, see Factors that Affect Data Access.
- The logged-in user must have read access to the object. For more information, see “Set Your Organization-Wide Sharing Defaults” in the Salesforce online help.
- The object must be configured to be replicateable (`replicateable` is `true`). To determine whether a given object can be replicated, your application can invoke the `describeSObject()` call on the object and inspect the `replicateable` property in the describeSObjectResult.

Polling for Changes

Client applications typically poll for changed data periodically. Polling involves the following considerations:

- The polling frequency depends on business requirements for how quickly changes in your organization’s Salesforce data need to be reflected in the local copy. Some client applications might poll once a day to retrieve changes, while other client applications might poll every five minutes to achieve closer accuracy.
- Deleted records are written to a delete log, which `getDeleted()` accesses. A background process that runs every two hours purges records that have been in an organization's delete log for more than two hours if the number of records is above a certain limit. Starting with the oldest records, the process purges delete log entries until the delete log is back below the limit. This is done to protect Salesforce from performance issues related to massive delete logs. The limit is calculated using this formula:

  ```
  5000 * number of licenses in the organization
  ```

  For example, an organization with 1,000 licenses could have up to 5,000,000 (five million) records in the delete log before any purging took place. If purging has been performed before your `getDeleted()` call is executed, an `INVALID_REPLICATION_DATE` error is returned. If you get this exception, you should do a full pull of the table.

- The API truncates the seconds portion of dateTime values. For example, if a client application submits a timespan between 12:30:15 and 12:35:15 (Coordinated Universal Time (UTC) time), then the API retrieves information about items that have changed between 12:30:00 and 12:35:00 (UTC), inclusive.

  Note: Development tools differ in the way that they handle time data. Some development tools report the local time, while others report only the Coordinated Universal Time (UTC) time. To determine how your development tool handles time values, refer to its documentation.

- We recommend polling no more frequently than every five minutes. There are built in controls to prevent errant applications from invoking the data replication API calls too frequently.
- Client applications should save the timespan used in previous data replication API calls so that the application knows the last time period for which data replication was successfully completed.
- To ensure data integrity on the local copy of the data, a client application needs to capture all of the relevant changes during polling—even if it requires processing data redundantly to ensure that there are no gaps. Your client application can contain business logic to skip processing objects that have already been integrated into your local data.

- Gaps can also occur if the client application somehow fails to poll the data as expected (for example, due to a hardware crash or network connection failure). Your client application can contain business logic that determines the last successful replication and polls for the next consecutive timespan.
- If for any reason the local data is compromised, your client application might also provide business logic for rebuilding the local data from scratch.

Note: You can now use Outbound Messaging to trigger actions instead of polling for them.

Checking for Structural Changes in the Object

In the API, data replication only reflects changes made to object records. It does not determine whether changes have been made to the structure of objects (for example, fields added to—or removed from—a custom object). It is the responsibility of the client application to check whether the structure of a given object has changed since the last update. Before replicating data, client applications can call `describeSObjects()` on the object, and then compare the data returned in the DescribeSObjectResult with the data returned and saved from previous `describeSObjects()` invocations.

CHAPTER 17 Feature-Specific Considerations

In this chapter ...

Some Salesforce features require special consideration when accessed via the API. Use the topics in this section to learn about the special considerations for activities, person accounts, forecast override business rules, the Call Center, and creating your own apps.

Archived Activities

Salesforce archives activities (tasks and events) that are over a year old.

You can use `queryAll()` to query on all Task and Event records, archived or not. You can also filter on the `isArchived` field to find only the archived objects. You cannot use `query()` as it automatically filters out all records where `isArchived` is set to `true`. You can update or delete archived records, though you cannot update the `isArchived` field. If you use the API to insert activities that meet the criteria listed below, the activities will be archived during the next run of the archival background process.

Older Events and Tasks are archived according to the criteria listed below. In the Salesforce user interface, users can view archived activities only in the **Printable View** or by clicking **View All** on the Activity History related list or by doing an advanced search. However, in the API, archived activities can only be queried via `queryAll()`.

Activity archive criteria:

- Events with an `ActivityDateTime` or `ActivityDate` value greater than or equal to 365 days old
- Tasks with an `IsClosed` value of `true` and an `ActivityDate` value greater than or equal to 365 days old
- Tasks with an `IsClosed` value of `true`, a blank `ActivityDate` field, and a create date greater than or equal to 365 days ago

Person Account Record Types

Beginning with API version 8.0, a new family of record types on Account objects is available: "person account" record types. The person account record types enable specialized business-to-consumer functionality for those who sell to or do business with individuals. For example, a doctor, hairdresser, or real estate agent whose clients are individuals. For more information about person accounts, see "Person Accounts" and "Considerations for Using Person Accounts" in the Salesforce online help.

Record types are person account record types if the Account field `IsPersonAccount` is set to `true`. Salesforce provides one default person account record type, PersonAccount, but an administrator can create additional person account record types. Conversely, record types with the Account field `IsPersonAccount` set to `false` are "business account" record types, which are traditional business-to-business (B2B) Salesforce accounts.

When a person account is created (or an existing business account is changed to a person account), a corresponding contact record is also created. This contact record is referred to as a "person contact." The person contact enables the person account to function simultaneously as both an account and a contact. This is the one and only contact record that can be associated directly with the person account. Also, the ID of the corresponding person contact record is stored in the `PersonContactId` field on the person account.

Review this list of facts about person account record types before working with them.

- You may need to contact your account representative to enable the person account feature.
- You can use a query similar to the following example to find all records with a person account record type:

```
SELECT Name, SobjectType,IsPersonType
FROM RecordType
WHERE SobjectType='Account' AND IsPersonType=True
```

- If you issue a `query()` call against an account, the results return the root object type in the `SobjectType` field. This means that the value returned will always be Account.
- A person contact can be modified, but cannot be created or deleted. Since these kinds of contacts do not have their own record detail page, clients should redirect users to the corresponding person account (Account) page. SOSL results will not include any of the contact fields enabled when `IsPersonAccount` is set to `true`. The contact `ReportsToId` field is not visible.
- If you delete the account, the contact is also deleted. You cannot directly delete the contact; you must delete the account.

- You can change the record type of an account across record type families (typically performed when migrating business accounts to person accounts, but the reverse operation is also supported). When you change the record type from a business account to a person account, the person contact is created. When you change the record type from a person account to a business account, the person fields are set to null, and the person contact becomes a regular contact with the same parent account it had before the change.

  Note: You cannot change record types across record type families in the Salesforce user interface.

- If you change the record type of a business account to a person account using either `update()` or `upsert()`, you cannot make any other changes to fields in that account in the same call; if attempted, the fault `INVALID_FIELD_FOR_INSERT_UPDATE` will result. However, you can change record type values from one person account record type to another, or from one business account record type to another, in the same call with other changes.
- When converting a business account to a person account, there must be a one-to-one relationship between each business account record and its corresponding contact record. Furthermore, fields common to both records such as `Owner` and `Currency` must have identical values.
- Workflow and validation formulas do not fire during a change in record types from or to person accounts.
- When you change a business account to a person account, valid records will be changed and invalid records will show an error in the results array.
- When you change a person account to a business account, no validation is performed.
- `describeLayout()` for version 7.0 and below will return the default business account record type as the default record type even if the tab default is a person account record type. In version 8.0 and after, it will always be the tab default.
- `describeLayout()` for version 7.0 and below will not return any person account record types.
- `describeSObject()` for version 7.0 and below will show Account objects as not createable if the profile does not have access to any business record types.
- After conversion, the new person accounts will have unique one-to-one relationships with the contact records that formed them. As is true for all person accounts, no other contacts can be associated to a person account.
- After conversion, any existing account field history information remains on the person accounts. Any existing contact field history information is retained on the contact, but is not added to the person accounts field history.

For more information about person accounts, see the Salesforce online help.

Opportunity Forecast Override Business Rules

Customizable forecasting is the preferred way to track revenue data in Salesforce. If you have customizable forecasting enabled for your organization, users with the "Override Forecast" permission can override forecast amounts for themselves and their direct reports. For more information, see "Override Customizable Forecasts" in the Salesforce online help.

You can use the following objects to retrieve opportunity forecast override information.

- OpportunityOverride
- LineitemOverride

These read-only objects keep an up-to-date record of the current values related to forecasts, whether those values are inherited directly from the opportunity or reflect an opportunity forecast override. Inherited values are stored in these objects, separate from the opportunity object, to improve performance.

The forecast is computed differently depending on whether or not there is an override record.

- If an override record exists (whether or not a particular value is overridden), the following values are used to compute the forecast for the `OwnerId` specified in the record.

  - Amount
  - Quantity
  - Forecast Period
  - Forecast Category
  - Unit Price on LineitemOverride
  - OpportunityOverride or LineitemOverride. These objects represent the user's view of the Opportunity or OpportunityLineItem with regard to forecasting, and may reflect overridden values from an opportunity owner or Forecast Manager below the specified user in the Forecast Hierarchy.
- If an override record does not exist, then the values stored in the Opportunity or OpportunityLineItem record are used, and no override information appears to the user.

In the Forecast Hierarchy, one user at each non-leaf level is designated as the Forecast Manager. The Forecast Manager sees the Opportunity Forecast Related List on the Opportunity Detail page when he or she views an opportunity owned by a subordinate user (if that user has the Allow Forecasting permission). A Forecast Manager's forecasts include contributions from those same subordinates. Other users in the same role as a Forecast Manager only see their own opportunities in their forecasts.

Note: Keep in mind that this section discusses both forecast managers and opportunity owners. When we describe traversals from a user and travelling along the forecast hierarchy, it is always in order, unless otherwise specified. For more information about forecast managers and the forecast hierarchy, see the Salesforce online help.

If your organization has territory management enabled, the territory hierarchy drives forecast data. See Territory Management Concepts in the Salesforce online help.

OpportunityOverride Lifecycle

OpportunityOverride records are created, updated, or deleted only under certain conditions, and only for relevant users.

Note: Because LineitemOverride records always have a parent record in the OpportunityOverride object with the same OpportunityId and OwnerId, this section explains the lifecycle of the OpportunityOverride records first, then explains any additional behaviors relevant only to LineitemOverride records.

Creating Opportunity Overrides

Forecast managers can override a forecast-related value (such as Amount, Quantity, Forecast Period, and ForecastCategory) by editing the Opportunity Forecasts related list on an opportunity owned by a subordinate user. Also, the opportunity owner can change Opportunity forecast-related values (such as ForecastCategory, StageName, Amount, and CloseDate) on an Opportunity that he or she owns. ForecastCategory has additional rules governing it; see Special Case: Forecast Category for more information.

When a user sets the first override for a particular Opportunity record, OpportunityOverride records are created and appropriate values are written for the opportunity owner and every forecast manager above the Opportunity owner in the forecast hierarchy. The values stored in each user's record depend on their location in the hierarchy—users below the user who made an override will have the original values. Other users will have the overrides, plus the Opportunity values for anything not overridden.

When subsequent override values are set, the new values are written to the OpportunityOverride records of the user who set the override and other forecast managers above in the forecast hierarchy, until an existing override value is reached.

Quantity can only be overridden in the Salesforce user interface if Quantity Forecasting is enabled on the Forecast Settings page, and Amount can only be overridden if Revenue Forecasting is enabled.

Note: Any changes that an opportunity owner can make on the Opportunity Forecast edit page are applied to the Opportunity record as well as the relevant OpportunityOverride records.

Updating Opportunity Values and Opportunity Override Values

Whenever an opportunity forecast-related value is updated on the Opportunity record itself, the corresponding records in the OpportunityOverride for the Opportunity owner and forecast managers above the owner in the forecast hierarchy are updated, until the first override value is encountered. The Opportunity owner cannot override anything except `ForecastCategory`, but he or she can edit the `CloseDate` and `StageName` on the Opportunity Forecast edit page, in addition to `ForecastCategory`. All three fields correspond to the Opportunity record, and the result is the same whether they make the changes on the Opportunity Forecast edit page or the Opportunity edit page.

Changes to the following Opportunity fields also affect records in the OpportunityOverride.

- `CloseDate` affects the forecast `PeriodId` if the new `CloseDate` falls into a different Forecast Period than the old `CloseDate`. In this case, the OpportunityOverride `PeriodId` is updated on the opportunity override record of the opportunity owner, and all forecast managers above the owner in the forecast hierarchy, until the first overriden `PeriodId` is encountered.
- CurrencyType `IsoCode` changes always cause an update to the opportunity owner's OpportunityOverride. No other object is updated unless `Amount` changes, which is often the case.
- If territory management is enabled, territory changes on the Opportunity affect OpportunityOverride records. An Opportunity owner's OpportunityOverrides are updated with the new territory, and OpportunityOverride records are inserted or updated for forecast managers above the Opportunity owner in the forecast hierarchy. OpportunityOverride records are also deleted for any forecast manager whose territory (stored on the override record) is no longer above the Opportunity owner in the new opportunity territory. That is, even if the Opportunity owner remains a subordinate of a forecast manager before and after the update, if they roll up into a different territory, that forecast manager loses the OpportunityOverrides for the old territory and new records are created for the new territory.
- When an Opportunity is set to `Closed Won` (the `StageName` value is `Closed Won`), the `AmountInherited`, `QuantityInherited`, and `PeriodInherited` fields in OpportunityOverride are set to `true` and the corresponding values are updated to match the Opportunity, if they are different. The OpportunityOverride `ForecastCategoryInherited` flag is also set to `true` and the Opportunity `ForecastCategory` is set to `Closed`, unless it has been overridden to `Omitted`. `Omitted` is the only valid `ForecastCategory` override for a `Closed Won` opportunity.
- When an Opportunity is set to `Closed Lost`, the `Amount` and `PeriodInherited` flags are set to `true`, and the corresponding values are updated to match the Opportunity, if they are different, and the `ForecastCategoryInherited` flag is set to `true` and the `ForecastCategory` is set to `Omitted` if the current value is anything other than `Omitted`.

Deleting Opportunity Overrides

OpportunityOverride records are not deleted unless one of the following triggering events occurs.

- An Opportunity is deleted.
- A change is made in the forecast hierarchy, such that a particular OpportunityOverride owner is no longer above the Opportunity owner or is no longer the forecast manager in the relevant role or territory.
- An Opportunity is transferred to a new owner or territory, individually or as part of an account transfer.
- The “Allow Forecasting” permission is removed from a user.

When an Opportunity is transferred to a new owner, an OpportunityOverride record for the new owner is added as needed, and OpportunityOverride records are deleted for all users that are not forecast managers above the new owner in the forecast hierarchy, possibly including the previous Opportunity owner. Also, OpportunityOverride records are updated or inserted as necessary for all forecast managers above the new owner in the forecast hierarchy. Restrictions on Opportunity owners are strictly enforced during a transfer. If the new owner was in the forecast hierarchy of the previous owner, and had made overrides that are no longer valid as the opportunity owner, such as an `Amount` override, then the corresponding inherited flag is set to `true` and the value is refreshed from the opportunity.

Special Case: Forecast Category

An additional rule applies to `ForecastCategory` values: If you set the `ForecastCategory` in a new opportunity that is not the default forecast category for the stage selected, or update an existing `ForecastCategory` on an opportunity, then OpportunityOverride records are created for relevant users as described above. Since only Opportunity owners can update the `ForecastCategory` on an opportunity record directly, this scenario is treated as a `ForecastCategory` override by the opportunity owner (the `ForecastCategoryInherited` flag on that user's OpportunityOverride record is `false`).

LineitemOverride Object Lifecycle

Additional rules apply to line item overrides, as explained in the rest of this section.

Creating Line Item Overrides

The full set of LineitemOverride records for each OpportunityOverride record is always created to mirror the line item records that exist for the Opportunity record. Whether a user makes an override at the opportunity level or line item level, or even just edits Forecast Category on the Opportunity Edit (only opportunity owners can do this), the end result is the same in terms of the Opportunity and LineitemOverride records that are created.

Updating Line Item Overrides

All information from Updating Opportunity Values and Opportunity Override Values applies to updating LineitemOverride records, with the following changes.

- Forecast Category overrides at the opportunity level are cascaded down into child LineitemOverride records, if the Forecast Category has not been overridden for a particular line item by that user or a subordinate user. That is, when a user establishes an opportunity-level Forecast Category override, any line item-level Forecast Category overrides by a subordinate forecast manager will take precedence when updating line item Forecast Category values for this user and any superiors. The converse is not true. Forecast Category on an OpportunityOverride record is never updated in response to a Forecast Category override on a LineitemOverride record by any user. When a user sets a Forecast Category override at the line item level, the override value is written to the LineitemOverride records of the user who set the override and other forecast managers above that user in the forecast hierarchy, until an existing override value is reached.
- Opportunity line item values for `Unit Price`, `Total Price` and `Quantity`, if changed, are saved on the LineitemOverride records for the opportunity owner and above in the forecast hierarchy, until the first overriden value is encountered for the field. `Quantity` can only be overridden in the Salesforce user interface if Quantity Forecasting is enabled on the Forecast Settings page. `Unit Price` and `Total Price` can only be overridden if Revenue Forecasting is enabled.

When `Quantity` or `Unit Price` are overridden, the `Total Price` is computed and written to the relevant LineitemOverride record. When `Total Price` is overridden, but not `Unit Price`, the `Unit Price` is computed and written to the relevant LineitemOverride records. If both are overridden, no computation occurs. The computation applies to the LineitemOverride record that contains the override value and related LineitemOverride records that inherit the overridden value. That is, for a given LineitemOverride record, we compute `Total Price` or `Unit Price` according to the above rules, if an override is made on the current record or if the record inherited an override made by a subordinate forecast manager.

If you selected the value **Schedule Date** in Forecasts Settings, you can’t override the following values.

- If forecasting by Revenue, or Revenue and Quantity, and the OpportunityLineItem record has a Revenue schedule, you cannot override `Unit Price` and `Total Price`.
- If forecasting by Quantity, or Revenue and Quantity, and the OpportunityLineItem records have Quantity schedules, you cannot override Quantity.

Deleting Line Item Overrides

Whenever a line item is deleted, LineitemOverride records relating to that line item are deleted for all users, similar to opportunities. Also, opportunity transfers and forecast hierarchy changes affect line item overrides the same way they affect opportunity overrides.

That is, if an OpportunityOverride record is deleted, all the child LineitemOverride records, matching on `OpportunityId` and `OwnerId`, are also deleted.

External Objects

Special behaviors and limitations apply to `queryAll()` and `queryMore()` calls on external data.

queryAll()

Because Salesforce doesn't track changes to external data, `queryAll()` behaves the same as `query()` for external objects.

queryMore()

It's common for Salesforce Connect queries of external data to have a large result set that's broken into smaller batches or pages. When querying external objects, Salesforce Connect accesses the external data in real time via Web service callouts. Each `queryMore()` call results in a Web service callout. The batch boundaries and page sizes depend on your adapter and how you set up the external data source.

We recommend the following:

- When possible, avoid paging by filtering your queries of external objects to return fewer rows than the batch size, which by default is 500 rows. Remember, obtaining each batch requires a `queryMore()` call, which results in a Web service callout.
- If the external data frequently changes, avoid using `queryMore()` calls. If the external data is modified between `queryMore()` calls, you can get an unexpected `QueryResult`.

If the primary or "driving" object for a `SELECT` statement is an external object, `queryMore()` supports only that primary object and doesn't support subqueries.

By default, the OData 2.0 and 4.0 adapters for Salesforce Connect use client-driven paging. With client-driven paging, OData adapters convert each `queryMore()` call into an OData query that uses the `$skip` and `$top` system query options to specify the batch boundary and page size. These options are similar to using `LIMIT` and `OFFSET` clauses to page through a result set.

If you enable server-driven paging on an external data source, Salesforce ignores the requested page sizes, including the default `queryMore()` batch size of 500 rows. The pages returned by the external system determine the batches, but each page can't exceed 2,000 rows.

Call Centers and the API

The API provides access to information about computer–telephony integration (CTI) call centers with the `describeSoftphoneLayout()` call. You must have the CTI feature enabled for your organization. Contact your account representative for assistance.

The API supports limited access to call center-related objects, including being able to create call centers, and create or modify additional numbers for the call center.

Topic	Description
CallCenter	Call Center object description, including fields and usage.
AdditionalNumber	Configuration settings that allow you to add an additional number if it cannot easily be categorized as a user, contact, lead, account, or any other object. Examples include phone queues or conference rooms.

In addition, several fields have been added to existing objects to support call centers. The following fields provide configuration settings for operation of a call center.

Object Name	Field Name	Field Type	Field Properties	Description
OpenActivity ActivityHistory Task	`CallDisposition`	string	Create (Task only) Filter Nillable Update (Task only)	Represents the result of a given call, for example, "we'll call back," or "call unsuccessful." Limit is 255 characters. For the Task object, corresponds to the Salesforce user interface label **Call Result**. You can also create and update values for this field in Task.
OpenActivity ActivityHistory Task	`CallDurationInSeconds`	int	Create (Task only) Filter Nillable Update (Task only)	Duration of the call in seconds. For Task, you can also create and update values for this field.
OpenActivity ActivityHistory Task	`CallObject`	string	Filter Nillable Update (Task only)	Name of a call center. Limit is 255 characters. For Task, you can also create and update values for this field.
OpenActivity ActivityHistory Task	`CallType`	picklist	Create (Task only) Filter Nillable Restricted picklist Update	The type of call being answered: Inbound, Internal, or Outbound. For Task, you can also create and update values for this field.
User	`CallCenterId`	reference	Create Filter Nillable Update	The unique identifier for the call center associated with this user.

Object Name	Field Name	Field Type	Field Properties	Description
User	UserPermissionsCallCenterAutoLogin	boolean	Create Update	Indicates whether a user will be automatically logged in to a call center when logging in to the Salesforce application (`true`) or not (`false`).

Implementing Salesforce Integrations on Lightning Platform

You can implement your Salesforce integrations or other client applications, on the Lightning platform by creating a Salesforce AppExchange app.

1. Create a WebLink that passes the user session ID and the API server URL to an external site:

   ```
   https://www.your_tool.com/test.jsp?sessionid={!API_Session_ID}&url={!API_Partner_Server_URL_80}
   ```

   Use `https` to ensure your session ID cannot be detected.

2. The page pointed to in the step above takes the session ID and uses it to call back to the API. Use `getUserInfo()` to return the `userID` associated with the session and related information. If needed, you can also use retrieve on the User object to retrieve any additional information you need about the user.
3. Maintain a cross-reference between the `UserId` or username and the corresponding user ID in your system, which you can do using a WebLink that is executed when the user clicks on a tab, or a WebLink on the page layout.
4. Package and upload this app using the instructions in the Salesforce online help topic “Prepare Your Apps for Distribution.”

Accessing Salesforce Data Using the API and OAuth

Salesforce supports OAuth 1.0A and 2.0 for SOAP API requests.

For OAuth version 1.0.A, after a third-party has successfully negotiated a session with Salesforce (using an already defined connected app and the OAuth protocol) and has a valid AccessToken, a client application can request to access Salesforce data using the API.

The following contains more detailed steps regarding accessing data for developers who are using a connected app to request Salesforce data.

1. The consumer makes an HTTPS POST request to Salesforce.
   - The URL must have the following format: `https://login.salesforce.com/services/OAuth/`*`type`*`/`*`api-version`*.

     `type` must have one of the following values.

     - `u`—Partner WSDL
     - `c`—Enterprise WSDL

     `api-version` must be a valid API version.

   - The authorization header must have the following parameters.
     - `oauth_consumer_key`
     - `oauth_token`

- `oauth_signature_method`
- `oauth_signature`
- `oauth_timestamp`
- `oauth_nonce`
- `oauth_version` (optional, must be “1.0” if included)

2. Salesforce validates the request and sends a valid session ID to the consumer. The response header includes the following.

```
<response>

<metadataServerUrl>https://yourInstance.salesforce.com/services/Soap/m/17.0/00D300000006qjK

    </metadataServerUrl>
    <sandbox>false</sandbox>
   <serverUrl>https://yourInstance.salesforce.com/services/Soap/u/17.0/00D300000006qjK

    </serverUrl>
    <sessionId>00D300000006qrN!AQoAQJTMzwTa67tGgQck1ng_xgMSuWVBpFwZ1xUq2kLjMYg6Zq
       GTS8Ezu_C3w0pdT1DMyHiJgB6fbhhEPxKjGqlYnlROIUs1</sessionId>
</response>
```

After an OAuth version 2.0 consumer has an access token, the method of using the token depends on the API in use.

- For the REST API, use an HTTP authorization header with the following format: `Authorization: Bearer` ***`Access_Token`***.
- For the SOAP API, the access token is placed in the SessionHeader SOAP authentication header.
- For the identity URL, use either an HTTP authorization header (as with the REST API) or an HTTP parameter `oauth_token`.

For more information, see Authenticating Apps with OAuth in the Salesforce online help.

Partners, who wish to get an OAuth consumer Id for authentication, can contact Salesforce

Articles

Articles capture information about your company's products and services that you want to make available in your knowledge base. Articles in the knowledge base can be classified by using one or more data categories to make it easy for users to find the articles they need. Administrators can use data categories to control access to articles.

Articles are based on article types, which rely on:

- Article-type layouts to organize the content in sections.
- Article-type templates to render articles.

Every article is managed in a publishing cycle.

Article Type

All articles in Salesforce Knowledge are assigned to an *article type*. An article's type determines the type of content it contains, its appearance, and which users can access it. For example, a simple FAQ article type can have two custom fields, `Question` and `Answer`, where article managers enter data when creating or updating FAQ articles. A more complex article type can have dozens of fields organized into several sections. Using layouts and templates, administrators can structure the article type in the most effective way for its particular content. User access to article types is controlled by permissions. For each article type, an administrator can grant “Create,” “Read,” “Edit,” or “Delete” permissions to users. For example, the article manager can allow internal users to read, create, and edit FAQ article types, but let partner users only read FAQs.

Article-Type Layout

An *article-type layout* enables administrators to create sections that organize the fields on an article, as well as choose which fields users can view and edit. One layout is available per article type. Administrators modify the layout from the article-type detail page.

Article-Type Template

An *article-type template* specifies how the sections in the article-type layout are rendered. An article type can have a different template for each of its four channels. For example, if the Customer Portal channel on the FAQ article-type is assigned to the Tab template, the sections in the FAQ's layout appear as tabs when customers view an FAQ article. For the Table of Contents template, the sections defined in the layout appear on a single page (with hyperlinks) when the article is viewed. Salesforce provides two standard article-type templates, Tab and Table of Contents. Custom templates can be created with Visualforce.

Channel

A channel refers to the medium by which an article is available. Salesforce Knowledge offers four channels where you can make articles available.

- Internal App: Salesforce users can access articles in the Articles tab depending on their role visibility.
- Customer: Customers can access articles if the Articles tab is available in a community or Customer Portal. Customer users inherit the role visibility of the manager on the account. In a community, the article is only available to users with Customer Community or Customer Community Plus licenses.
- Partner: Partners can access articles if the Articles tab is available in a community or partner portal. Partner users inherit the role visibility of the manager on the account. In a community, the article is only available to users with Partner Community licenses.
- Public Knowledge Base: Articles can be made available to anonymous users by creating a public knowledge base using the *Sample Public Knowledge Base for Salesforce Knowledge* app from the AppExchange. Creating a public knowledge base requires Sites and Visualforce.

Publishing Cycle

Salesforce Knowledge Articles move through a publishing cycle from their creation to their deletion. The publishing cycle includes three different statuses: `Draft` is the stage when a new article is being created or an existing one is being updated. Articles with the `Online` status are draft articles that have been published and are now available to their different channels. Eventually, when a published article is at the end of its life, it can be moved to the `Archived` status or sent back to `Draft` to be updated in a subsequent version.

Working with Articles in the API

Articles are available through the KnowledgeArticleVersion and KnowledgeArticle objects in the API. They both represent an article but provide different capabilities.

KnowledgeArticleVersion

Every new draft article in Salesforce Knowledge has a version number. When an article is published and you want to update it, you can create a new `Draft` with a distinct version number. Each version has its own ID. Once the updated version is ready to be published, it replaces the former one and updates the version number. You can access the content of an article version using the KnowledgeArticleVersion object and filter on its Draft or Online status. For example, the following query returns the title of the Draft version of all the articles across all article types in United States English:

```
SELECT Title
FROM KnowledgeArticleVersion
WHERE PublishStatus='Draft'
AND language ='en_US'
```

You can change the language to return any other language your knowledge base supports, see “Support a Multilingual Knowledge Base” in the Salesforce online help.

Articles are also auto-assigned an Article Number, which is not a unique identifier to an individual article, but an identifier to a master article and all of its available translations.

> **Note:** Both the master version (the Knowledge article with IsMasterLanguage = 1) and the translations are KnowledgeArticleVersion objects.

KnowledgeArticle

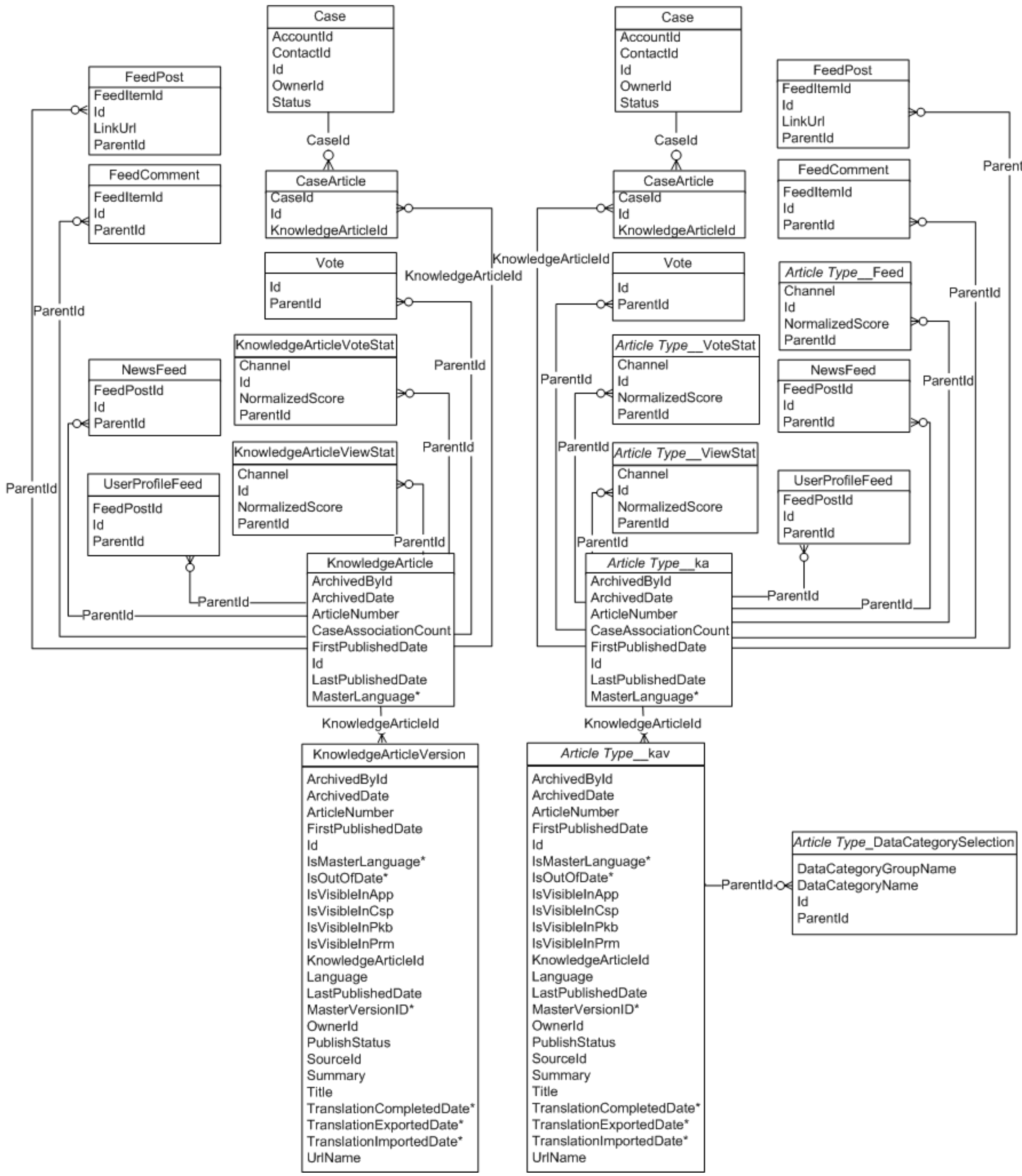
Unlike KnowledgeArticleVersion, the ID of a KnowledgeArticle record is identical irrespective of the article's version (status). Where the KnowledgeArticleVersion object provides API access to an article's custom field values, the KnowledgeArticle object provides API access to an article's metadata fields.

The article record is the parent container of all versions of an article, whatever the publishing status (draft, published, archived) and the language. While KnowledgeArticle and KnowledgeArticleVersion represent any article in the Knowledge Base, <Article Type>__ka and <Article Type>__kav are the concrete representation of respectively KnowledgeArticle ("__ka" suffix) and KnowledgeArticleVersion ("__kav" suffix) for a specific article type. For example, Offer__kav gives access to every Offer articles. KnowledgeArticle and <Article Type>__ka give access to an article independent of its version. KnowledgeArticleVersion and <ArticleType>__kav enables you to retrieve a specific article version and all its standard (KnowledgeArticleVersion) and custom (<ArticleType>__kav) fields. The following query returns the title for all the published offers in United States English:

```
SELECT Title
FROM Offer__kav
WHERE PublishStatus='online'
AND language ='en_US'
```

Salesforce Knowledge Objects

This entity relationship diagram (ERD) illustrates relationships between the Salesforce Knowledge objects.



For field definitions, see its object's page within this guide. Fields with an asterisk (*) are only accessible if your knowledge base supports multiple languages, see “Support a Multilingual Knowledge Base” in the Salesforce online help.

Data Categories

Data categories are organized by category group and let:

- Users classify and find records.
- Administrators control access to records.

Data categories can be used by Salesforce Knowledge (articles) and answers communities (questions).

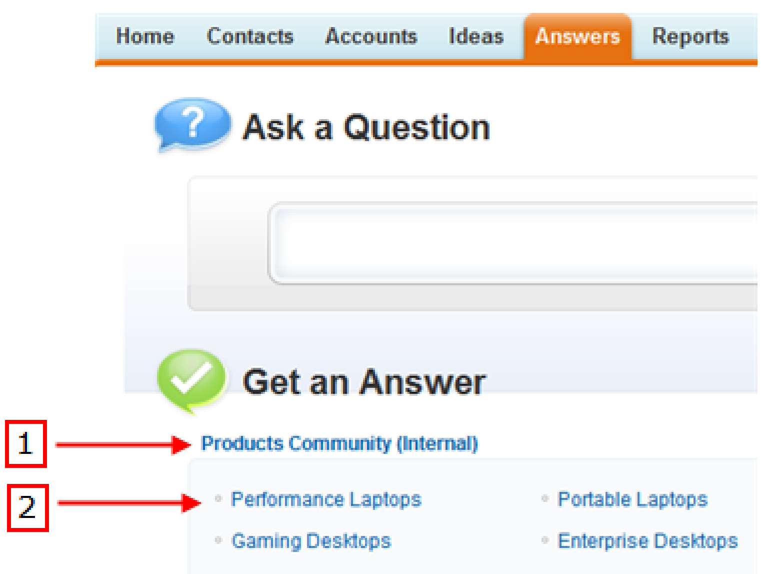
Data Categories and Articles

Salesforce Knowledge uses data categories to classify articles and make them easier to find. For example, to classify articles by sales regions and products, create two category groups: Sales Regions and Products. The Sales Regions category group could consist of a geographical hierarchy, such as All Sales Regions as the top level and North America, Europe, and Asia at the second level. The Products group could have All Products as the top level and Phones, Computers, and Printers at the second.

Data Category Limits	Details	
Maximum number of data category groups and active data category groups	5 category groups, with 3 groups active at a time	5 category groups, with 3 groups active at a time
Maximum number of categories per data category group	100 categories in a data category group	100 categories in a data category group
Maximum number of levels in data category group hierarchy	5 levels in a data category group hierarchy	5 levels in a data category group hierarchy
Maximum number of data categories from a data category group assigned to an article	8 data categories from a data category group assigned to an article	8 data categories from a data category group assigned to an article

Data Categories and Answers

In an answers zone, data categories help organize questions for easy browsing. Each answers zone supports one category group. For example, if you're a computer manufacturer you might create a Products category group that has four sibling categories: Performance Laptops, Portable Laptops, Gaming Desktops, and Enterprise Desktops. On the Answers tab, zone members can assign one of the four categories to each question and then browse these categories for answers to specific questions.



Working with Data Categories in the API

The following table lists API resources for working with data categories.

Name	Type	Description
Article Type__DataCategorySelection	Object	Gives access to article categorization.
QuestionDataCategorySelection	Object	Gives access to question categorization.
WITH DATA CATEGORY ***filteringExpression***	SOQL clause	Filters articles depending on their status in the publishing cycle and their data categories. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.
WITH DATA CATEGORY ***DataCategorySpec***	SOSL clause	Finds articles based on their categorization. For more information, see the *Salesforce SOQL and SOSL Reference Guide*.
describeDataCategoryGroups()	Call	Retrieves available category groups for objects specified in the request.
describeDataCategoryGroupStructures()	Call	Retrieves available category groups along with their data category structure for objects specified in the request.
describeDataCategoryGroups	Apex method	Returns a list of the category groups associated with the specified objects. See the *Apex Developer Guide*.
describeDataCategoryGroupStructures	Apex method	Returns available category groups along with their data category structure for objects specified in the request. See the *Apex Developer Guide*.

GLOSSARY

A |B |C |D |E |F |G |H |I |J |K |L |M |N |O |P |Q |R |S |T |U |V |W |X |Y |Z

A

AJAX Toolkit

A JavaScript wrapper around the API that allows you to execute any API call and access any object you have permission to view from within JavaScript code. For more information, see the *AJAX Toolkit Developer's Guide*.

Anonymous Block, Apex

Apex code that does not get stored in Salesforce, but that can be compiled and executed by using the `ExecuteAnonymousResult()` API call, or the equivalent in the AJAX Toolkit.

Anti-Join

An anti-join is a subquery on another object in a `NOT IN` clause in a SOQL query. You can use anti-joins to create advanced queries. See also Semi-Join.

Apex

Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in conjunction with calls to the Lightning Platform API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects.

Apex-Managed Sharing

Enables developers to programmatically manipulate sharing to support their application's behavior. Apex-managed sharing is only available for custom objects.

App

Short for "application." A collection of components such as tabs, reports, dashboards, and Visualforce pages that address a specific business need. Salesforce provides standard apps such as Sales and Service. You can customize the standard apps to match the way you work. In addition, you can package an app and upload it to the AppExchange along with related components such as custom fields, custom tabs, and custom objects. Then, you can make the app available to other Salesforce users from the AppExchange.

AppExchange

The AppExchange is a sharing interface from Salesforce that allows you to browse and share apps and services for the Lightning Platform.

AppExchange Upgrades

Upgrading an app is the process of installing a newer version.

Application Programming Interface (API)

The interface that a computer system, library, or application provides to allow other computer programs to request services from it and exchange data.

B

Boolean Operators

You can use Boolean operators in report filters to specify the logical relationship between two values. For example, the AND operator between two values yields search results that include both values. Likewise, the OR operator between two values yields search results that include either value.

Bulk API

The REST-based Bulk API is optimized for processing large sets of data. It allows you to query, insert, update, upsert, or delete a large number of records asynchronously by submitting a number of batches which are processed in the background by Salesforce. See also SOAP API.

C

Callout, Apex

An Apex callout enables you to tightly integrate your Apex with an external service by making a call to an external Web service or sending a HTTP request from Apex code and then receiving the response.

Child Relationship

A relationship that has been defined on an sObject that references another sObject as the "one" side of a one-to-many relationship. For example, contacts, opportunities, and tasks have child relationships with accounts.

See also sObject.

Class, Apex

A template or blueprint from which Apex objects are created. Classes consist of other classes, user-defined methods, variables, exception types, and static initialization code. In most cases, Apex classes are modeled on their counterparts in Java.

Client App

An app that runs outside the Salesforce user interface and uses only the Lightning Platform API or Bulk API. It typically runs on a desktop or mobile device. These apps treat the platform as a data source, using the development model of whatever tool and platform for which they are designed.

Component, Visualforce

Something that can be added to a Visualforce page with a set of tags, for example, `<apex:detail>`. Visualforce includes a number of standard components, or you can create your own custom components.

Component Reference, Visualforce

A description of the standard and custom Visualforce components that are available in your organization. You can access the component library from the development footer of any Visualforce page or the *Visualforce Developer's Guide*.

Controller, Visualforce

An Apex class that provides a Visualforce page with the data and business logic it needs to run. Visualforce pages can use the standard controllers that come by default with every standard or custom object, or they can use custom controllers.

Controlling Field

Any standard or custom picklist or checkbox field whose values control the available values in one or more corresponding dependent fields.

Custom App

See App.

Custom Field

A field that can be added in addition to the standard fields to customize Salesforce for your organization's needs.

Custom Help
Custom text administrators create to provide users with on-screen information specific to a standard field, custom field, or custom object.

Custom Links
Custom links are URLs defined by administrators to integrate your Salesforce data with external websites and back-office systems. Formerly known as Web links.

Custom Object
Custom records that allow you to store information unique to your organization.

Custom S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

Custom Web content for use in custom links. Custom s-controls can contain any type of content that you can display in a browser, for example a Java applet, an Active-X control, an Excel file, or a custom HTML Web form.

D

Database
An organized collection of information. The underlying architecture of the Lightning Platform includes a database where your data is stored.

Database Table
A list of information, presented with rows and columns, about the person, thing, or concept you want to track. See also Object.

Data Loader
A Lightning Platform tool used to import and export data from your Salesforce organization.

Data Manipulation Language (DML)
An Apex method or operation that inserts, updates, or deletes records.

Date Literal
A keyword in a SOQL or SOSL query that represents a relative range of time such as `last month` or `next year`.

Decimal Places
Parameter for number, currency, and percent custom fields that indicates the total number of digits you can enter to the right of a decimal point, for example, 4.98 for an entry of 2. Note that the system rounds the decimal numbers you enter, if necessary. For example, if you enter 4.986 in a field with `Decimal Places` of 2, the number rounds to 4.99. Salesforce uses the round half-up rounding algorithm. Half-way values are always rounded up. For example, 1.45 is rounded to 1.5. –1.45 is rounded to –1.5.

Delegated Authentication
A security process where an external authority is used to authenticate Lightning Platform users.

Dependent Field
Any custom picklist or multi-select picklist field that displays available values based on the value selected in its corresponding controlling field.

Developer Edition
A free, fully-functional Salesforce organization designed for developers to extend, integrate, and develop with the Lightning Platform. Developer Edition accounts are available on developer.salesforce.com.

Salesforce Developers

The Salesforce Developers website at developer.salesforce.com provides a full range of resources for platform developers, including sample code, toolkits, an online developer community, and the ability to obtain limited Lightning Platform environments.

Document Library

A place to store documents without attaching them to accounts, contacts, opportunities, or other records.

E

Email Alert

Email alerts are actions that send emails, using a specified email template, to specified recipients.

Email Template

A form email that communicates a standard message, such as a welcome letter to new employees or an acknowledgement that a customer service request has been received. Email templates can be personalized with merge fields, and can be written in text, HTML, or custom format.

Enterprise Edition

A Salesforce edition designed for larger, more complex businesses.

Enterprise WSDL

A strongly-typed WSDL for customers who want to build an integration with their Salesforce organization only, or for partners who are using tools like Tibco or webMethods to build integrations that require strong typecasting. The downside of the Enterprise WSDL is that it only works with the schema of a single Salesforce organization because it is bound to all of the unique objects and fields that exist in that organization's data model.

Entity Relationship Diagram (ERD)

A data modeling tool that helps you organize your data into entities (or objects, as they are called in the Lightning Platform) and define the relationships between them. ERD diagrams for key Salesforce objects are published in the *SOAP API Developer's Guide*.

F

Field

A part of an object that holds a specific piece of information, such as a text or currency value.

Field-Level Security

Settings that determine whether fields are hidden, visible, read only, or editable for users. Available in Professional, Enterprise, Unlimited, Performance, and Developer Editions.

Filter Condition/Criteria

Condition on particular fields that qualifies items to be included in a list view or report, such as "State equals California."

Lightning Platform

The Salesforce platform for building applications in the cloud. Lightning Platform combines a powerful user interface, operating system, and database to allow you to customize and deploy applications in the cloud for your entire enterprise.

Foreign Key

A field whose value is the same as the primary key of another table. You can think of a foreign key as a copy of a primary key from another table. A relationship is made between two tables by matching the values of the foreign key in one table with the values of the primary key in another.

Formula Field

A type of custom field. Formula fields automatically calculate their values based on the values of merge fields, expressions, or other values.

Function

Built-in formulas that you can customize with input parameters. For example, the DATE function creates a date field type from a given year, month, and day.

G

Gregorian Year

A calendar based on a 12-month structure used throughout much of the world.

Group Edition

A product designed for small businesses and workgroups with a limited number of users.

H

HTTP Debugger

An application that can be used to identify and inspect SOAP requests that are sent from the AJAX Toolkit. They behave as proxy servers running on your local machine and allow you to inspect and author individual requests.

I

ID

See Salesforce Record ID.

Inline S-Control

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An s-control that displays within a record detail page or dashboard, rather than on its own page.

Instance

The cluster of software and hardware represented as a single logical server that hosts an organization's data and runs their applications. The Lightning Platform runs on multiple instances, but data for any single organization is always stored on a single instance.

Integration User

A Salesforce user defined solely for client apps or integrations. Also referred to as the logged-in user in a SOAP API context.

ISO Code

The International Organization for Standardization country code, which represents each country by two letters.

J

Junction Object

A custom object with two master-detail relationships. Using a custom junction object, you can model a “many-to-many” relationship between two objects. For example, you create a custom object called “Bug” that relates to the standard case object such that a bug could be related to multiple cases and a case could also be related to multiple bugs.

K

No Glossary items for this entry.

L

License Management Application (LMA)
A free AppExchange app that allows you to track sales leads and accounts for every user who downloads your managed package (app) from the AppExchange.

License Management Organization (LMO)
The Salesforce organization that you use to track all the Salesforce users who install your package. A license management organization must have the License Management Application (LMA) installed. It automatically receives notification every time your package is installed or uninstalled so that you can easily notify users of upgrades. You can specify any Enterprise, Unlimited, Performance, or Developer Edition organization as your license management organization. For more information, go to http://www.salesforce.com/docs/en/lma/index.htm.

List View
A list display of items (for example, accounts or contacts) based on specific criteria. Salesforce provides some predefined views.

In the Agent console, the list view is the top frame that displays a list view of records based on specific criteria. The list views you can select to display in the console are the same list views defined on the tabs of other objects. You cannot create a list view within the console.

Locale
The country or geographic region in which the user is located. The setting affects the format of date and number fields, for example, dates in the English (United States) locale display as 06/30/2000 and as 30/06/2000 in the English (United Kingdom) locale.

In Professional, Enterprise, Unlimited, Performance, and Developer Edition organizations, a user's individual `Locale` setting overrides the organization's `Default Locale` setting. In Personal and Group Editions, the organization-level locale field is called `Locale`, not `Default Locale`.

Logged-in User
In a SOAP API context, the username used to log into Salesforce. Client applications run with the permissions and sharing of the logged-in user. Also referred to as an integration user.

M

Managed Package
A collection of application components that is posted as a unit on the AppExchange and associated with a namespace and possibly a License Management Organization. To support upgrades, a package must be managed. An organization can create a single managed package that can be downloaded and installed by many different organizations. Managed packages differ from unmanaged packages by having some locked components, allowing the managed package to be upgraded later. Unmanaged packages do not include locked components and cannot be upgraded. In addition, managed packages obfuscate certain components (like Apex) on subscribing organizations to protect the intellectual property of the developer.

Manual Sharing
Record-level access rules that allow record owners to give read and edit permissions to other users who might not have access to the record any other way.

Many-to-Many Relationship

A relationship where each side of the relationship can have many children on the other side. Many-to-many relationships are implemented through the use of junction objects.

Master-Detail Relationship

A relationship between two different types of records that associates the records with each other. For example, accounts have a master-detail relationship with opportunities. This type of relationship affects record deletion, security, and makes the lookup relationship field required on the page layout.

Master Picklist

A complete list of picklist values available for a record type or business process.

Metadata

Information about the structure, appearance, and functionality of an organization and any of its parts. Lightning Platform uses XML to describe metadata.

Metadata WSDL

A WSDL for users who want to use the Lightning Platform Metadata API calls.

Multitenancy

An application model where all users and apps share a single, common infrastructure and code base.

N

Namespace

In a packaging context, a one- to 15-character alphanumeric identifier that distinguishes your package and its contents from packages of other developers on AppExchange, similar to a domain name. Salesforce automatically prepends your namespace prefix, followed by two underscores ("__"), to all unique component names in your Salesforce organization.

Native App

An app that is built exclusively with setup (metadata) configuration on Lightning Platform. Native apps do not require any external services or infrastructure.

O

Object

An object allows you to store information in your Salesforce organization. The object is the overall definition of the type of information you are storing. For example, the case object allow you to store information regarding customer inquiries. For each object, your organization will have multiple records that store the information about specific instances of that type of data. For example, you might have a case record to store the information about Joe Smith's training inquiry and another case record to store the information about Mary Johnson's configuration issue.

Object-Level Help

Custom help text that you can provide for any custom object. It displays on custom object record home (overview), detail, and edit pages, as well as list views and related lists.

Object-Level Security

Settings that allow an administrator to hide whole objects from users so that they don't know that type of data exists. Object-level security is specified with object permissions.

onClick JavaScript

JavaScript code that executes when a button or link is clicked.

One-to-Many Relationship

A relationship in which a single object is related to many other objects. For example, an account may have one or more related contacts.

Organization-Wide Defaults

Settings that allow you to specify the baseline level of data access that a user has in your organization. For example, you can set organization-wide defaults so that any user can see any record of a particular object that is enabled via their object permissions, but they need extra permissions to edit one.

Outbound Call

Any call that originates from a user to a number outside of a call center in Salesforce CRM Call Center.

Outbound Message

An outbound message sends information to a designated endpoint, like an external service. Outbound messages are configured from Setup. You must configure the external endpoint and create a listener for the messages using the SOAP API.

Overlay

An overlay displays additional information when you hover your mouse over certain user interface elements. Depending on the overlay, it will close when you move your mouse away, click outside of the overlay, or click a close button.

Owner

Individual user to which a record (for example, a contact or case) is assigned.

P

PaaS

See Platform as a Service.

Package

A group of Lightning Platform components and applications that are made available to other organizations through the AppExchange. You use packages to bundle an app along with any related components so that you can upload them to AppExchange together.

Package Dependency

This is created when one component references another component, permission, or preference that is required for the component to be valid. Components can include but are not limited to:

- Standard or custom fields
- Standard or custom objects
- Visualforce pages
- Apex code

Permissions and preferences can include but are not limited to:

- Divisions
- Multicurrency
- Record types

Package Installation

Installation incorporates the contents of a package into your Salesforce organization. A package on the AppExchange can include an app, a component, or a combination of the two. After you install a package, you may need to deploy components in the package to make it generally available to the users in your organization.

Package Publication

Publishing your package makes it publicly available on the AppExchange.

Package Version

A package version is a number that identifies the set of components uploaded in a package. The version number has the format *`majorNumber.minorNumber.patchNumber`* (for example, 2.1.3). The major and minor numbers increase to a chosen value during every major release. The *`patchNumber`* is generated and updated only for a patch release.

Unmanaged packages are not upgradeable, so each package version is simply a set of components for distribution. A package version has more significance for managed packages. Packages can exhibit different behavior for different versions. Publishers can use package versions to evolve the components in their managed packages gracefully by releasing subsequent package versions without breaking existing customer integrations using the package. See also Patch and Patch Development Organization.

Parent Account

An organization or company that an account is affiliated. By specifying a parent for an account, you can get a global view of all parent/subsidiary relationships using the **View Hierarchy** link.

Partner WSDL

A loosely-typed WSDL for customers, partners, and ISVs who want to build an integration or an AppExchange app that can work across multiple Salesforce organizations. With this WSDL, the developer is responsible for marshaling data in the correct object representation, which typically involves editing the XML. However, the developer is also freed from being dependent on any particular data model or Salesforce organization. Contrast this with the Enterprise WSDL, which is strongly typed.

Patch

A patch enables a developer to change the functionality of existing components in a managed package, while ensuring subscribing organizations that there are no visible behavior changes to the package. For example, you can add new variables or change the body of an Apex class, but you may not add, deprecate, or remove any of its methods. Patches are tracked by a *`patchNumber`* appended to every package version. See also Patch Development Organization and Package Version.

Patch Development Organization

The organization where patch versions are developed, maintained, and uploaded. Patch development organizations are created automatically for a developer organization when they request to create a patch. See also Patch and Package Version.

Personal Edition

Product designed for individual sales representatives and single users.

Personal Information

User information including personal contact information, quotas, personal group information, and default opportunity team.

Picklist

Selection list of options available for specific fields in a Salesforce object, for example, the `Industry` field for accounts. Users can choose a single value from a list of options rather than make an entry directly in the field. See also Master Picklist.

Picklist (Multi-Select)

Selection list of options available for specific fields in a Salesforce object. Multi-select picklists allow users to choose one or more values. Users can choose a value by double clicking on it, or choose additional values from a scrolling list by holding down the CTRL key while clicking a value and using the arrow icon to move them to the selected box.

Picklist Values

Selections displayed in drop-down lists for particular fields. Some values come predefined, and other values can be changed or defined by an administrator.

Platform as a Service (PaaS)

An environment where developers use programming tools offered by a service provider to create applications and deploy them in a cloud. The application is hosted as a service and provided to customers via the Internet. The PaaS vendor provides an API for creating and extending specialized applications. The PaaS vendor also takes responsibility for the daily maintenance, operation, and support of the deployed application and each customer's data. The service alleviates the need for programmers to install, configure, and maintain the applications on their own hardware, software, and related IT resources. Services can be delivered using the PaaS environment to any market segment.

Platform Edition

A Salesforce edition based on Enterprise, Unlimited, or Performance Edition that does not include any of the standard Salesforce apps, such as Sales or Service & Support.

Primary Key

A relational database concept. Each table in a relational database has a field in which the data value uniquely identifies the record. This field is called the primary key. The relationship is made between two tables by matching the values of the foreign key in one table with the values of the primary key in another.

Production Organization

A Salesforce organization that has live users accessing data.

Professional Edition

A Salesforce edition designed for businesses who need full-featured CRM functionality.

Q

Queue

A holding area for items before they are processed. Salesforce uses queues in a number of different features and technologies.

Query Locator

A parameter returned from the `query()` or `queryMore()` API call that specifies the index of the last result record that was returned.

Query String Parameter

A name-value pair that's included in a URL, typically after a '?' character. For example:

```
https://yourInstance.salesforce.com/001/e?name=value
```

R

Record

A single instance of a Salesforce object. For example, "John Jones" might be the name of a contact record.

Record Name

A standard field on all Salesforce objects. Whenever a record name is displayed in a Lightning Platform application, the value is represented as a link to a detail view of the record. A record name can be either free-form text or an autonumber field. `Record Name` does not have to be a unique value.

Record Type

A record type is a field available for certain records that can include some or all of the standard and custom picklist values for that record. You can associate record types with profiles to make only the included picklist values available to users with that profile.

Record-Level Security

A method of controlling data in which you can allow a particular user to view and edit an object, but then restrict the records that the user is allowed to see.

Recycle Bin

A page that lets you view and restore deleted information. Access the Recycle Bin by using the link in the sidebar.

Related Object

Objects chosen by an administrator to display in the Agent console's mini view when records of a particular type are shown in the console's detail view. For example, when a case is in the detail view, an administrator can choose to display an associated account, contact, or asset in the mini view.

Relationship

A connection between two objects, used to create related lists in page layouts and detail levels in reports. Matching values in a specified field in both objects are used to link related data; for example, if one object stores data about companies and another object stores data about people, a relationship allows you to find out which people work at the company.

Relationship Query

In a SOQL context, a query that traverses the relationships between objects to identify and return results. Parent-to-child and child-to-parent syntax differs in SOQL queries.

Report Type

A *report type* defines the set of records and fields available to a report based on the relationships between a primary object and its related objects. Reports display only records that meet the criteria defined in the report type. Salesforce provides a set of pre-defined standard report types; administrators can create custom report types as well.

Role Hierarchy

A record-level security setting that defines different levels of users such that users at higher levels can view and edit information owned by or shared with users beneath them in the role hierarchy, regardless of the organization-wide sharing model settings.

Roll-Up Summary Field

A field type that automatically provides aggregate values from child records in a master-detail relationship.

Running User

Each dashboard has a *running user*, whose security settings determine which data to display in a dashboard. If the running user is a specific user, all dashboard viewers see data based on the security settings of that user—regardless of their own personal security settings. For dynamic dashboards, you can set the running user to be the logged-in user, so that each user sees the dashboard according to his or her own access level.

S

SaaS

See Software as a Service (SaaS).

S-Control

> Note: S-controls have been superseded by Visualforce pages. After March 2010 organizations that have never created s-controls, as well as new organizations, won't be allowed to create them. Existing s-controls will remain unaffected, and can still be edited.

Custom Web content for use in custom links. Custom s-controls can contain any type of content that you can display in a browser, for example a Java applet, an Active-X control, an Excel file, or a custom HTML Web form.

Salesforce Record ID

A unique 15- or 18-character alphanumeric string that identifies a single record in Salesforce.

Salesforce SOA (Service-Oriented Architecture)

A powerful capability of Lightning Platform that allows you to make calls to external Web services from within Apex.

Sandbox

A nearly identical copy of a Salesforce production organization for development, testing, and training. The content and size of a sandbox varies depending on the type of sandbox and the edition of the production organization associated with the sandbox.

Search Layout

The organization of fields included in search results, in lookup dialogs, and in the key lists on tab home pages.

Search Phrase

Search phrases are queries that users enter when searching on www.google.com.

Semi-Join

A semi-join is a subquery on another object in an `IN` clause in a SOQL query. You can use semi-joins to create advanced queries, such as getting all contacts for accounts that have an opportunity with a particular record type. See also Anti-Join.

Session ID

An authentication token that is returned when a user successfully logs in to Salesforce. The Session ID prevents a user from having to log in again every time they want to perform another action in Salesforce. Different from a record ID or Salesforce ID, which are terms for the unique ID of a Salesforce record.

Session Timeout

The time after login before a user is automatically logged out. Sessions expire automatically after a predetermined length of inactivity, which can be configured in Salesforce from Setup by clicking **Security Controls**. The default is 120 minutes (two hours). The inactivity timer is reset to zero if a user takes an action in the web interface or makes an API call.

Setup

A menu where administrators can customize and define organization settings and Lightning Platform apps. Depending on your organization's user interface settings, Setup may be a link in the user interface header or in the dropdown list under your name.

Sharing

Allowing other users to view or edit information you own. There are different ways to share data:

- Sharing Model—defines the default organization-wide access levels that users have to each other's information and whether to use the hierarchies when determining access to data.
- Role Hierarchy—defines different levels of users such that users at higher levels can view and edit information owned by or shared with users beneath them in the role hierarchy, regardless of the organization-wide sharing model settings.
- Sharing Rules—allow an administrator to specify that all information created by users within a given group or role is automatically shared to the members of another group or role.
- Manual Sharing—allows individual users to share records with other users or groups.
- Apex-Managed Sharing—enables developers to programmatically manipulate sharing to support their application's behavior. See Apex-Managed Sharing.

Sharing Model

Behavior defined by your administrator that determines default access by users to different types of records.

Sharing Rule

Type of default sharing created by administrators. Allows users in a specified group or role to have access to all information created by users within a given group or role.

Sites

Salesforce Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.

Snippet

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A type of s-control that is designed to be included in other s-controls. Similar to a helper method that is used by other methods in a piece of code, a snippet allows you to maintain a single copy of HTML or JavaScript that you can reuse in multiple s-controls.

SOAP (Simple Object Access Protocol)

A protocol that defines a uniform way of passing XML-encoded data.

SOAP API

A SOAP-based Web services application programming interface that provides access to your Salesforce organization's information.

sObject
The abstract or parent object for all objects that can be stored in the Lightning Platform.

Software as a Service (SaaS)
A delivery model where a software application is hosted as a service and provided to customers via the Internet. The SaaS vendor takes responsibility for the daily maintenance, operation, and support of the application and each customer's data. The service alleviates the need for customers to install, configure, and maintain applications with their own hardware, software, and related IT resources. Services can be delivered using the SaaS model to any market segment.

SOQL (Salesforce Object Query Language)
A query language that allows you to construct simple but powerful query strings and to specify the criteria that selects data from the Lightning Platform database.

SOSL (Salesforce Object Search Language)
A query language that allows you to perform text-based searches using the Lightning Platform API.

Standard Object
A built-in object included with the Lightning Platform. You can also build custom objects to store information that is unique to your app.

Syndication Feeds
Give users the ability to subscribe to changes within Salesforce Sites and receive updates in external news readers.

System Log
Part of the Developer Console, a separate window console that can be used for debugging code snippets. Enter the code you want to test at the bottom of the window and click Execute. The body of the System Log displays system resource information, such as how long a line took to execute or how many database calls were made. If the code did not run to completion, the console also displays debugging information.

T

Test Method
An Apex class method that verifies whether a particular piece of code is working properly. Test methods take no arguments, commit no data to the database, and can be executed by the `runTests()` system method either through the command line or in an Apex IDE, such as the Force.com IDE.

Translation Workbench
The Translation Workbench lets you specify languages you want to translate, assign translators to languages, create translations for customizations you've made to your Salesforce organization, and override labels and translations from managed packages. Everything from custom picklist values to custom fields can be translated so your global users can use Salesforce in their language.

Trigger
A piece of Apex that executes before or after records of a particular type are inserted, updated, or deleted from the database. Every trigger runs with a set of context variables that provide access to the records that caused the trigger to fire, and all triggers run in bulk mode—that is, they process several records at once, rather than just one record at a time.

Trigger Context Variable
Default variables that provide access to information about the trigger and the records that caused it to fire.

U

Unit Test

A unit is the smallest testable part of an application, usually a method. A unit test operates on that piece of code to make sure it works correctly. See also Test Method.

Unlimited Edition

Unlimited Edition is Salesforce's solution for maximizing your success and extending that success across the entire enterprise through the Lightning Platform.

Unmanaged Package

A package that cannot be upgraded or controlled by its developer.

URL (Uniform Resource Locator)

The global address of a website, document, or other resource on the Internet. For example, http://www.salesforce.com.

URL S-Control

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An s-control that contains an external URL that hosts the HTML that should be rendered on a page. When saved this way, the HTML is hosted and run by an external website. URL s-controls are also called web controls.

V

Validation Rule

A rule that prevents a record from being saved if it does not meet the standards that are specified.

Visualforce

A simple, tag-based markup language that allows developers to easily define custom pages and components for apps built on the platform. Each tag corresponds to a coarse or fine-grained component, such as a section of a page, a related list, or a field. The components can either be controlled by the same logic that is used in standard Salesforce pages, or developers can associate their own logic with a controller written in Apex.

W

Web Control

See URL S-Control.

Web Links

See Custom Links.

Web Service

A mechanism by which two applications can easily exchange data over the Internet, even if they run on different platforms, are written in different languages, or are geographically remote from each other.

Web Services API

A Web services application programming interface that provides access to your Salesforce organization's information. See also SOAP PI and Bulk API.

WebService Method
An Apex class method or variable that external systems can use, like a mash-up with a third-party application. Web service methods must be defined in a global class.

Web Tab
A custom tab that allows your users to use external websites from within the application.

Automated Actions
Automated actions, such as email alerts, tasks, field updates, and outbound messages, can be triggered by a process, workflow rule, approval process, or milestone.

Workflow Action
A workflow action, such as an email alert, field update, outbound message, or task, fires when the conditions of a workflow rule are met.

Workflow Email Alert
A workflow action that sends an email when a workflow rule is triggered. Unlike workflow tasks, which can only be assigned to application users, workflow alerts can be sent to any user or contact, as long as they have a valid email address.

Workflow Field Update
A workflow action that changes the value of a particular field on a record when a workflow rule is triggered.

Workflow Outbound Message
A workflow action that sends data to an external Web service, such as another cloud computing application. Outbound messages are used primarily with composite apps.

Workflow Queue
A list of workflow actions that are scheduled to fire based on workflow rules that have one or more time-dependent workflow actions.

Workflow Rule
A workflow rule sets workflow actions into motion when its designated conditions are met. You can configure workflow actions to execute immediately when a record meets the conditions in your workflow rule, or set time triggers that execute the workflow actions on a specific day.

Workflow Task
A workflow action that assigns a task to an application user when a workflow rule is triggered.

Wrapper Class
A class that abstracts common functions such as logging in, managing sessions, and querying and batching records. A wrapper class makes an integration more straightforward to develop and maintain, keeps program logic in one place, and affords easy reuse across components. Examples of wrapper classes in Salesforce include the AJAX Toolkit, which is a JavaScript wrapper around the Salesforce SOAP API, wrapper classes such as `CCritical Section` in the CTI Adapter for Salesforce CRM Call Center, or wrapper classes created as part of a client integration application that accesses Salesforce using the SOAP API.

WSC (Web Service Connector)
An XML-based Web service framework that consists of a Java implementation of a SOAP server. With WSC, developers can develop client applications in Java by using Java classes generated from Salesforce Enterprise WSDL or Partner WSDL.

WSDL (Web Services Description Language) File
An XML file that describes the format of messages you send and receive from a Web service. Your development environment's SOAP client uses the Salesforce Enterprise WSDL or Partner WSDL to communicate with Salesforce using the SOAP API.

X

No Glossary items for this entry.

Y

No Glossary items for this entry.

Z

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