

Using Print Organizer to Create the Complete Project Print Set

You can use Print Organizer to create and manage prints — both paper and digital. Print Organizer uses everything from the pen tables and printer driver configuration files to paper sizes and scales, to create print definitions for plan sheets automatically. Much of the setup is performed by choosing the desired Print Style during print definition creation.

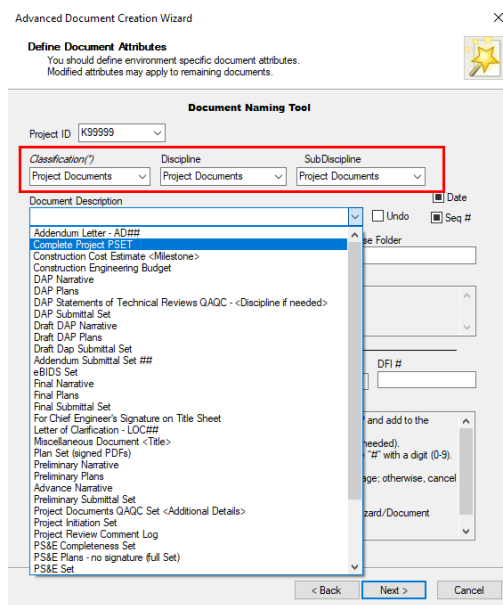
Print Organizer creates and uses print set (PSET) files as a container to store multiple print definitions. When multiple print definitions are stored, they are arranged in a hierarchical structure and may be placed into folder groups.

A seed print set file has been created for use in assembling contract plans. `KeyNu.pset` is located in the `CAD_Resources\Seed` folder in ProjectWise. This file, described as “Template for a Print Set (PSET)”, should be used as a template when creating a new document in the `2_Plan_Sheets` folder in the ODOT ProjectWise datasource. `KeyNu.pset` contains named folders that are in order of the sections that are found in plan sets. When using the Document Naming Tool, select the Classification, Discipline and Sub Discipline of “Project Documents” – then choose “Complete Project PSET” from the Document Description list.


When creating print definitions, it is necessary to select a print style. The “_Sheet_” print styles at the top of the list are for use with sheet-type models. “_Sheet_” print styles **only** search for sheet-type models, set the paper size and attach the pen table that is in the print style name. The “zDesign_” print styles are for use with older techniques of creating stacked borders in a design-type model. “zDesign_” print styles will search for rectangular yellow shapes on a specific level, but **only in** the design-type models within files you add into the Print Organizer. The yellow shape is inside the ODOT border cells. Print definitions are created in the same order that the cells and shapes were placed into the models originally. It is the *order of placement*, not the location, which governs the order in which the print definitions are created from design-type models.

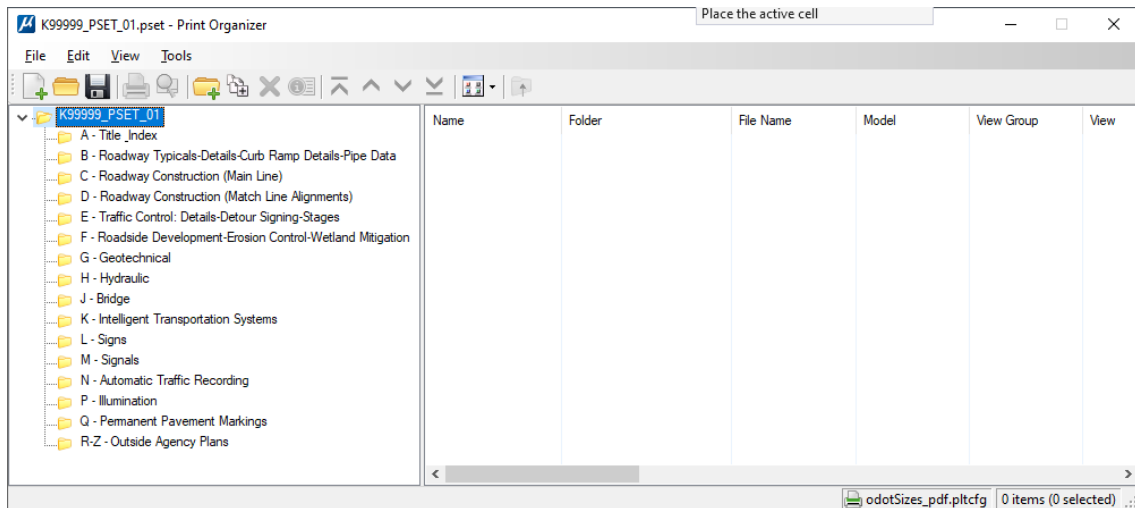
Creating Print Definitions in a Complete Project PSET from Data Stored in ProjectWise

1. In the ProjectWise Explorer, use New Document>Advanced Wizard to create `K#####_PSET_##.pset` from the `KeyNu.pset` template (Complete Project PSET) in `CAD_Resources\Seed`. On the ODOT Naming Tool screen, use the Project Documents classification to locate the “Complete Project PSET” document description.



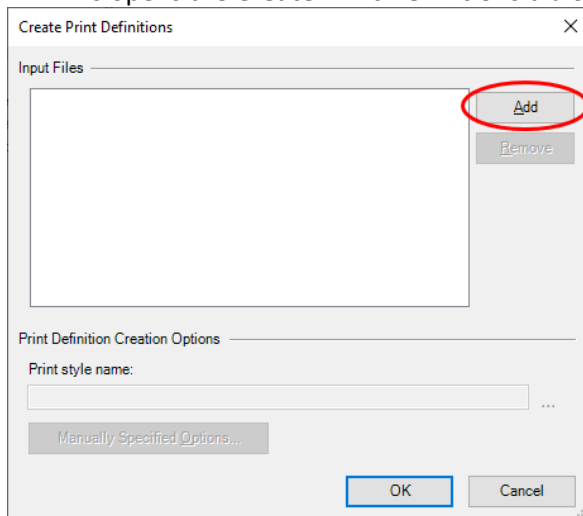
2. Open any DGN in the `2_Plan_Sheets` folder. If you have recently made edits to the DGN, ensure that you use **Update Server Copy** before continuing.

3. Open the **Print Organizer** dialog. (Click on the Print Organizer icon: )
4. Load the print set seed file for the project K#####_PSET_##.pset using File>Open. This loads the empty folder structure for a contract plans print set.



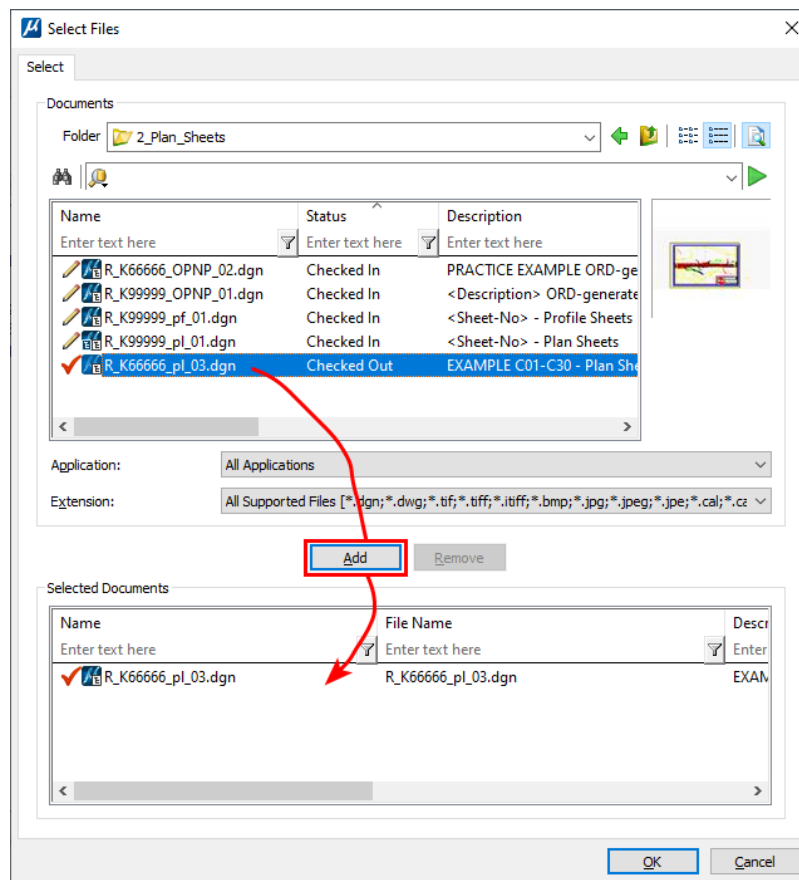
5. Select a sub-folder in the left window of the Print Organizer and choose **File>Add Files to Set...**

This opens the **Create Print Definitions** dialog.

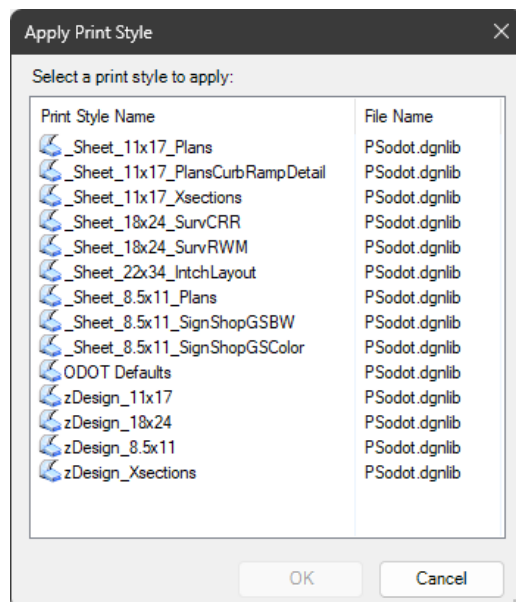


6. Click **[Add]**.
The **Select Files** dialog opens.

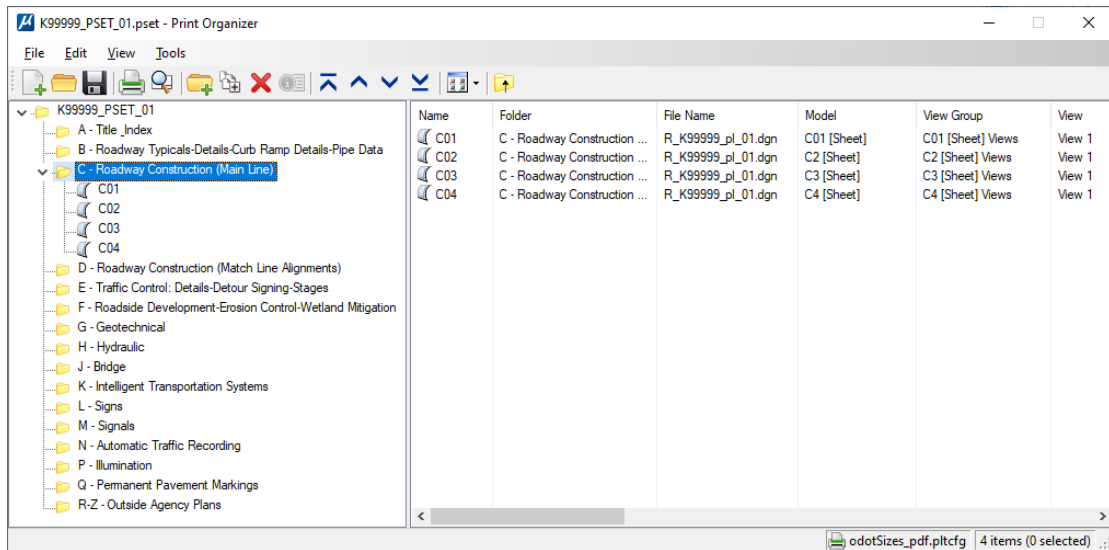
7. Select and add DGN files containing sheet models to the “Selected Documents” list.



- The **Select Files** dialog stays open while you navigate in the ProjectWise folder structure, if necessary, to add files from a different folder.
8. When done adding files, click [OK].
 9. On the **Create Print Definitions** dialog, click the magnifying glass icon across from the Print Style Name field.
 10. Select a print style, such as _Sheet_11x17_Plans, from the **Apply Print Style** dialog and click [OK].



- Click **[OK]** on the **Create Print Definitions** dialog. The print definitions are displayed in the Print Organizer.



- Choose **File>Save** to save the print definitions.

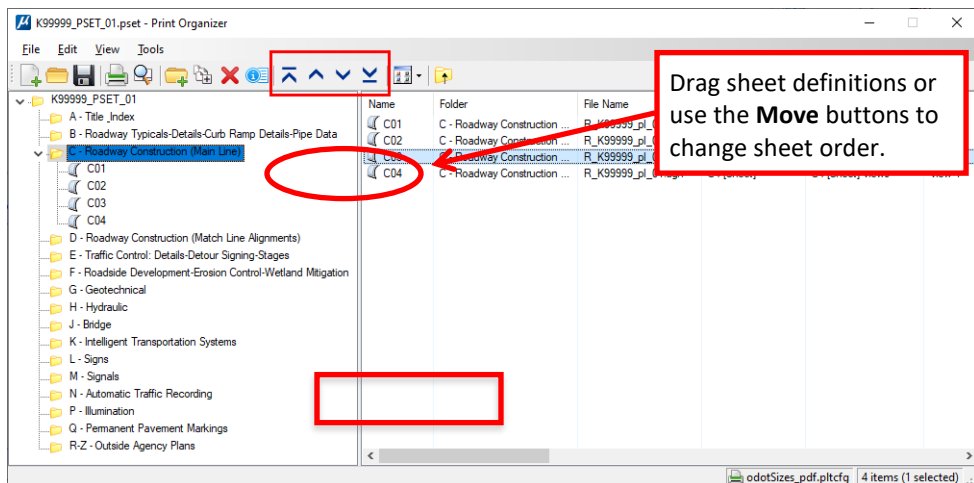
- When you close the Print Organizer, **Check In** the PSET file.

To preview the sheets in each Print Organizer folder

- Right-click the sheet name(s) in the right pane and select **Print Preview** from the drop-down menu.

To change the sheet order in Print Organizer:

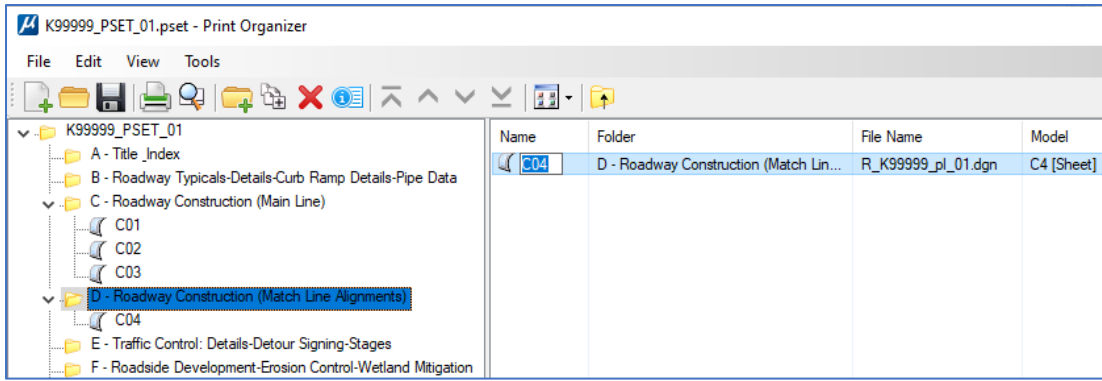
- Select the sheet(s) from the right-hand pane to move, and then drag and drop or use the **Move** buttons to move the sheet(s), even into a different folder.



Renaming Print Definitions

Changing a single print definition name to match sheet names or numbers

- Right-click on a single print definition in the right pane and select **Rename** from the drop-down menu, or slowly double-click on a single selection to highlight the name for replacement.



Note: We specify default print definition names to be pulled from the Sheet Number property of the sheet-type model. Ensure that the model properties display the correct Sheet Number value prior to creating print definitions.

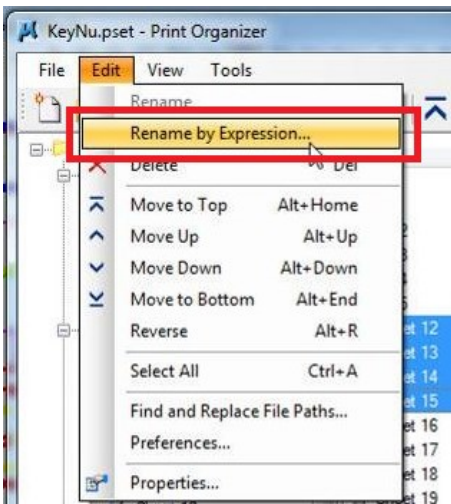


Note: A different expression name may be used before creating the print definitions by opening **File>Default Print Definition Name...** from the Print Organizer dialog.

Renaming Multiple Sequential Print Definitions

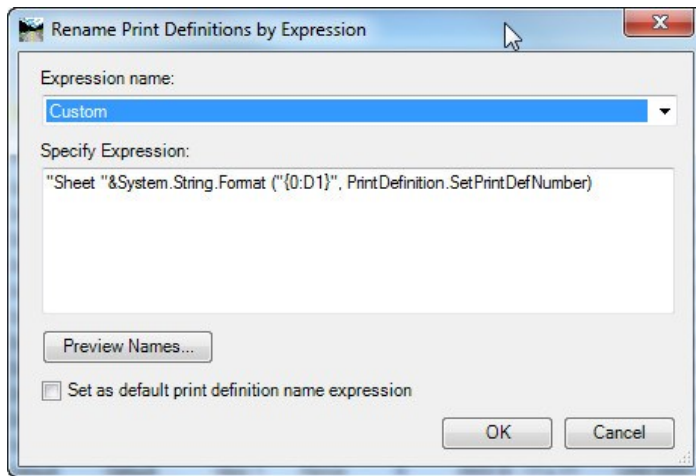
Follow these steps to rename multiple sequential print definitions where a numeric sequence can be used to rename a group of sheets.

1. Make a selection set and choose **Edit > Rename by Expression...** from the Print Organizer main menu.



The Rename Print Definitions by Expression dialog opens.

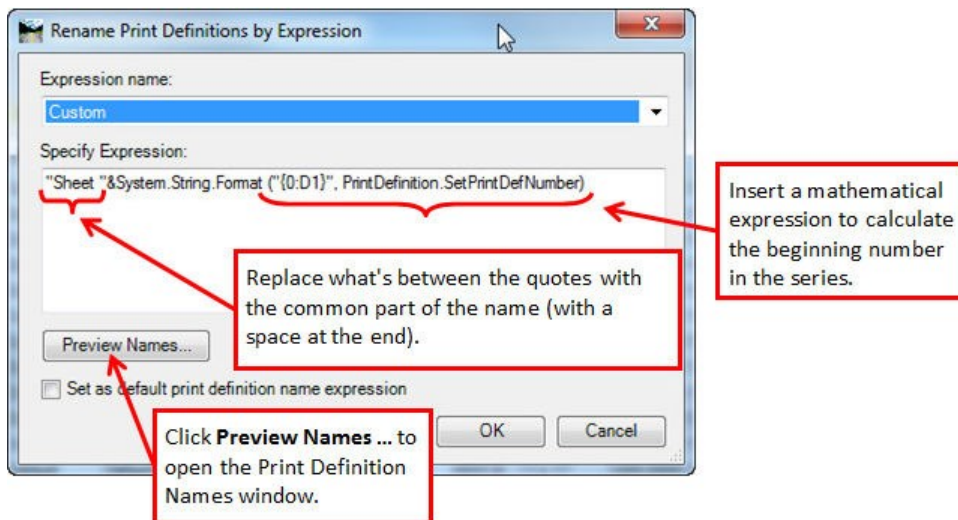
2. Click the **Expression name** drop-down arrow and select **Custom**.



This enables editing of the **Specify Expression** field. The text inside the quotation marks is used for each name.

3. Edit the *Expression name* as follows:

- a. Replace what's between the quote marks with the part of the name that is repeated.
- b. Insert a mathematical expression to calculate the beginning number in the series.
- c. Click **Preview Names...** to open the **Print Definition Names** dialog and verify the print definitions are correctly numbered.
- d. Click **[OK]** to rename the print definitions.



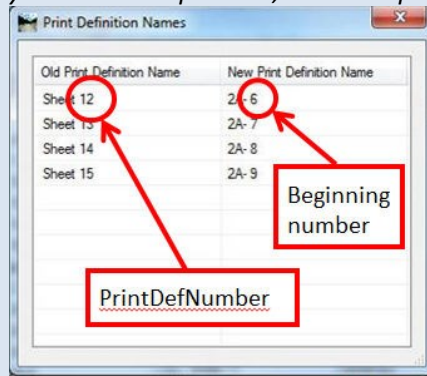
Note: To specify the mathematical expression to calculate the beginning number in a Print Definitions series, use the following formula:

$$\text{Number to subtract} = \text{PrintDefNumber} - \text{Beginning Number}$$

For the example shown below:

1. Replace **"Sheet "&System.String.Format ("{0:D1}", PrintDefinition.SetPrintDefNumber)** with **"2A- "&System.String.Format ("{0:D1}", PrintDefinition.SetPrintDefNumber-6)**

2. Click **Preview Names ...** to confirm the formula works. If you don't like the names you see in the preview, close the preview and click **Cancel**.



3. Click **[OK]** to save the print definition expression.

4. After creating, ordering and renaming print definitions, save the print set:

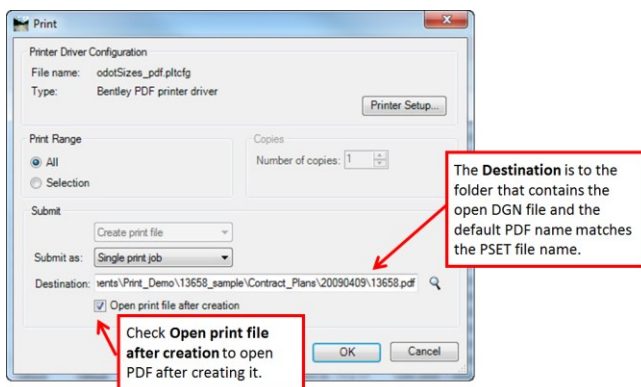
- a. Select **File > Save As...** on the Print Organizer main menu and navigate to your project folders in the *Windows file system*.
- b. Change the name of the file from KeyNu.pset to use the project key number or name. This name will be used when creating a single PDF print job. Always save files prior to printing or creating PDFs.

PDFing with Print Organizer

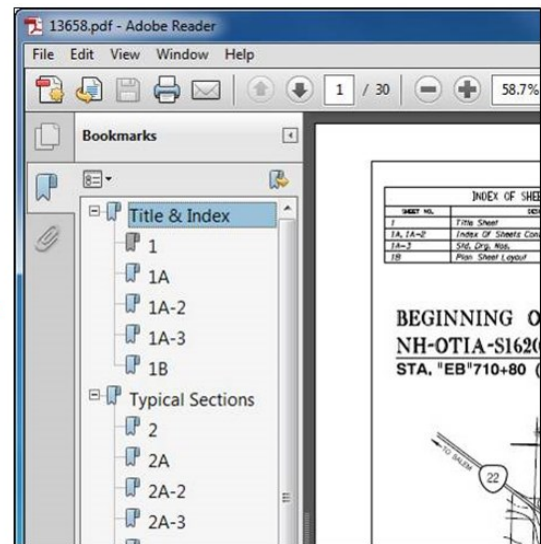
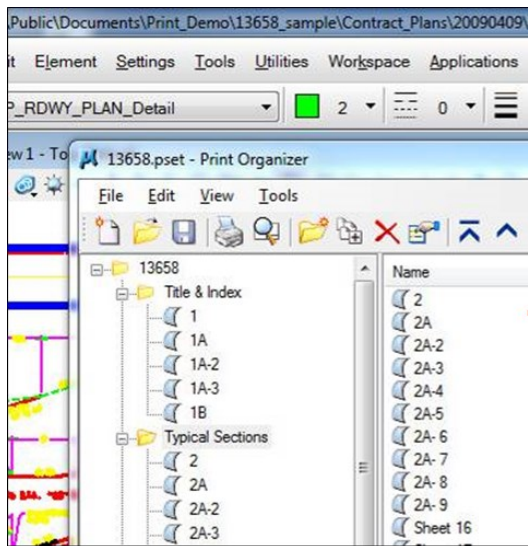
The Print Organizer uses worker sessions (no interface) to open the files used in the print definitions to generate a dynamic print. It works best when the active DGN is not one of the files in the print set. If your active file is used in a print definition, ensure that you **Save Settings** (Ctrl + F) and use **Update Server Copy** before creating prints.

With Print Organizer open and a PSET file loaded,

1. Select **File > Print...** on the Print Organizer main menu or right click on a sheet and select **Print...** from the drop-down menu to open the **Print** dialog.



2. For the **Print Range**, select **All**.
3. In the **Submit as** field, select **Single print job**.
4. Click **[OK]** to create one PDF file with all sheets.



Note: Only populated folders in the Print Organizer create bookmarks in the resulting PDF.

Small Format Paper Printing

When you create print definitions, it is recommended that you choose a print style that creates PDFs. If you would like to print to paper or mylar later, it is best to divert to a printer at print time. For small format paper printing, confirm that your default Windows printer has the paper size you want to print on. Then, when you choose the appropriate printer driver configuration file, the correct paper size will be set.



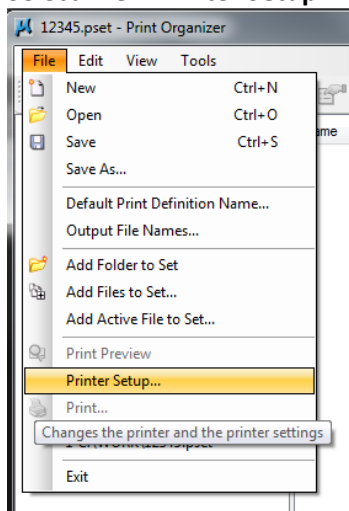
Reminder: The Print Styles will apply a pen table and a PLTCFG file to control the type of printing.



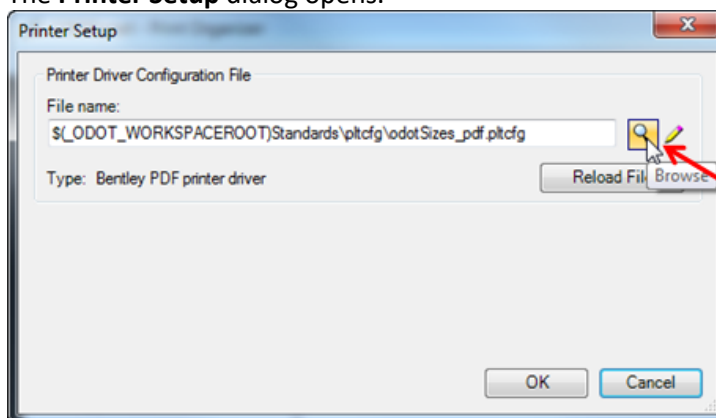
Note: The `odotAB_printer.pltcfg` printer driver configuration file automatically sets a paper size of **ANSI B -11 x 17**.

To change from creating a PDF to printing 11x17 on a small format printer:

1. Select **File > Printer Setup...** from the main menu on the **Print Organizer** dialog.

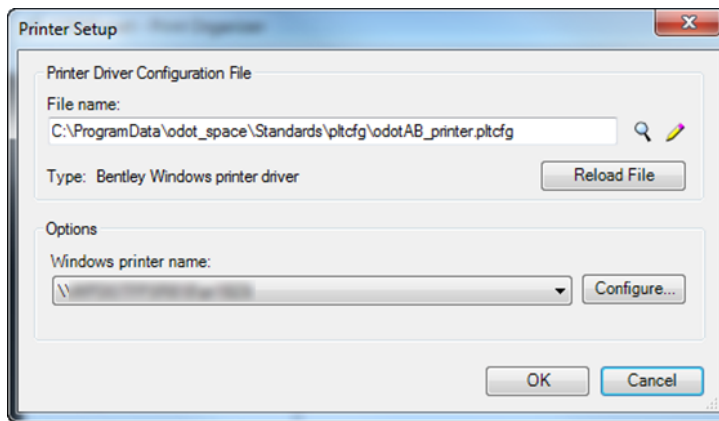


The **Printer Setup** dialog opens.



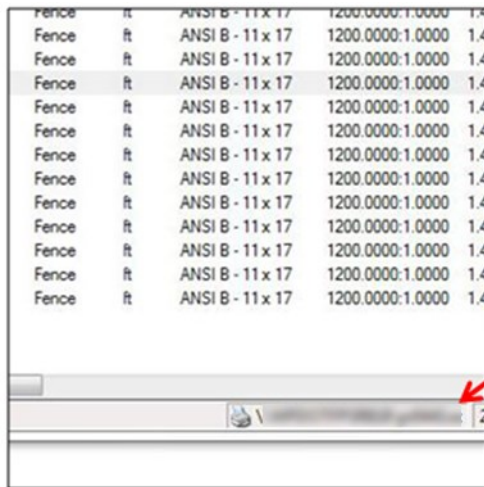
Browse, select `odotAB_printer.pltcfg` and click **Open**.

2. On the **Printer Setup** dialog, click the **Magnifying Glass** icon.
3. Select `odotAB_printer.pltcfg` and click **Open**.



4. Click **[OK]** to close the **Printer Setup** dialog.

The Print Organizer refreshes to display the selected small format printer in the lower right corner; all other properties of the print definitions remain the same as they were.



The paper size and scale remain the same, while the updated printer path displays at the bottom of the Print Organizer window.

5. Select **File > Print...** to send the prints to your default printer.



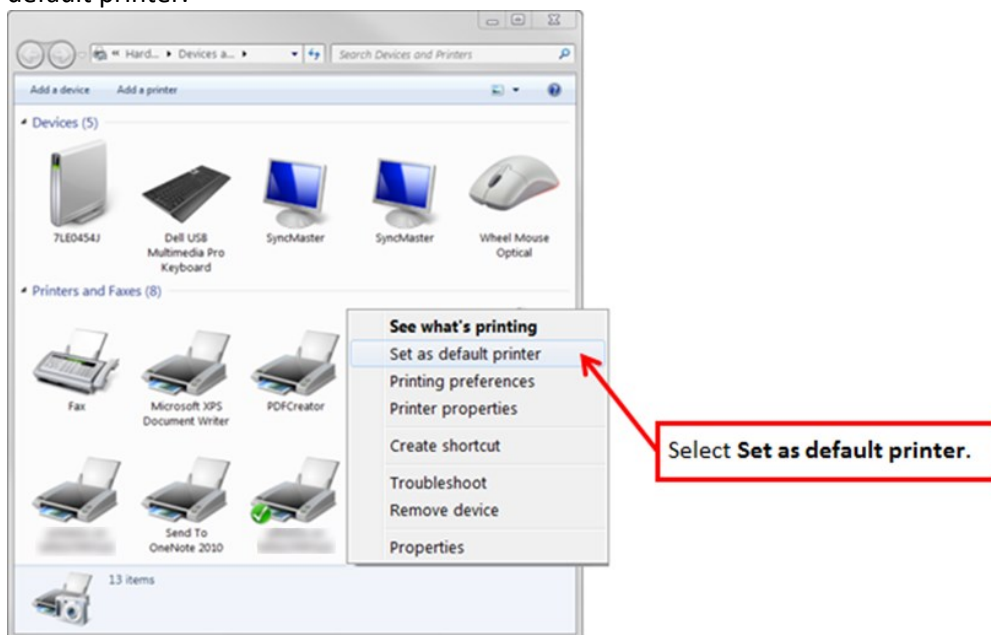
Note: Close Print Organizer without saving and free the PSET to retain the original PDF print definitions.

Large Format Paper Printing

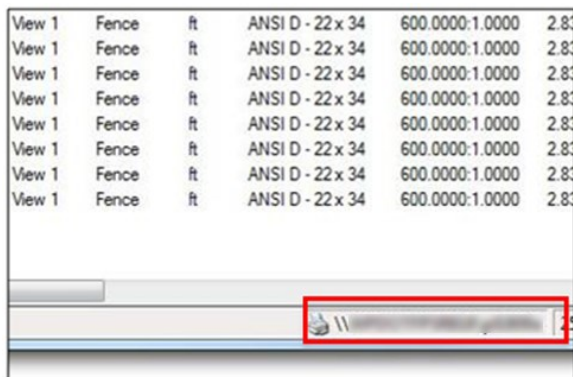
You may also change from small format PDF to large format paper or mylar after the print definitions have been created. For large format paper printing, confirm that your default Windows printer is set to a plotter and has the paper size you want to print on. Then, when you choose the appropriate printer driver configuration file, the correct paper size will be set.

To change from creating an 11x17 PDF to printing 22x34 on a large format plotter:

1. From the Control Panel, open the Devices and Printers window and **set a plotter** to be the default printer.



2. Select **File > Printer Setup...** from the main menu on the **Print Organizer** dialog.
3. Follow the steps shown in the Small Format Paper Printing section above to browse to the printer driver configuration files and choose **odotCD_printer.pltcf**.
4. Upon clicking **[OK]** on the **Printer Setup** dialog to accept the change in the printer driver configuration file, the paper size and scale automatically adjust to the larger format. The printer path to the plotter displays at the bottom of the Print Organizer window.



5. Select **File > Print...** to send the prints to your plotter.

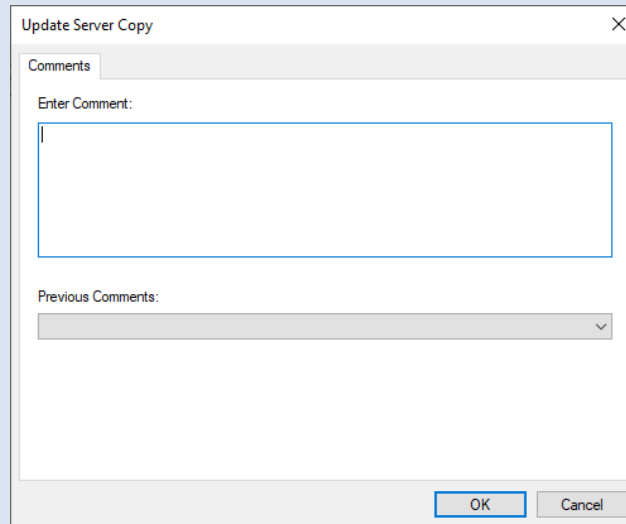
Save the Print Definition File

The PSET file contains all the information about the print definitions and can be reopened in Print Organizer for printing single sheets from the print set, for reprinting after revisions are made to content, or for applying a different print style to create check prints, PDF files or Mylar prints.

The print definition file does not contain any information about elements in the file. It does contain a fence location and when you request a print preview or a print, the print setup looks at the source file to determine which elements are displayed within the fence location. When you save the PSET file, it records the fence locations, the path and name of the source files, the paper size and scale.



Tip! The Print Organizer is tightly integrated with ProjectWise Explorer. Saving changes to a print set only requires one step if your files are stored in a ProjectWise datasource. Use **File>Save** in Print Organizer, then select **OK** on the **Update Server Copy** dialog. You will be prompted to check the PSET in when you close the Print Organizer – but the changes have already been saved.



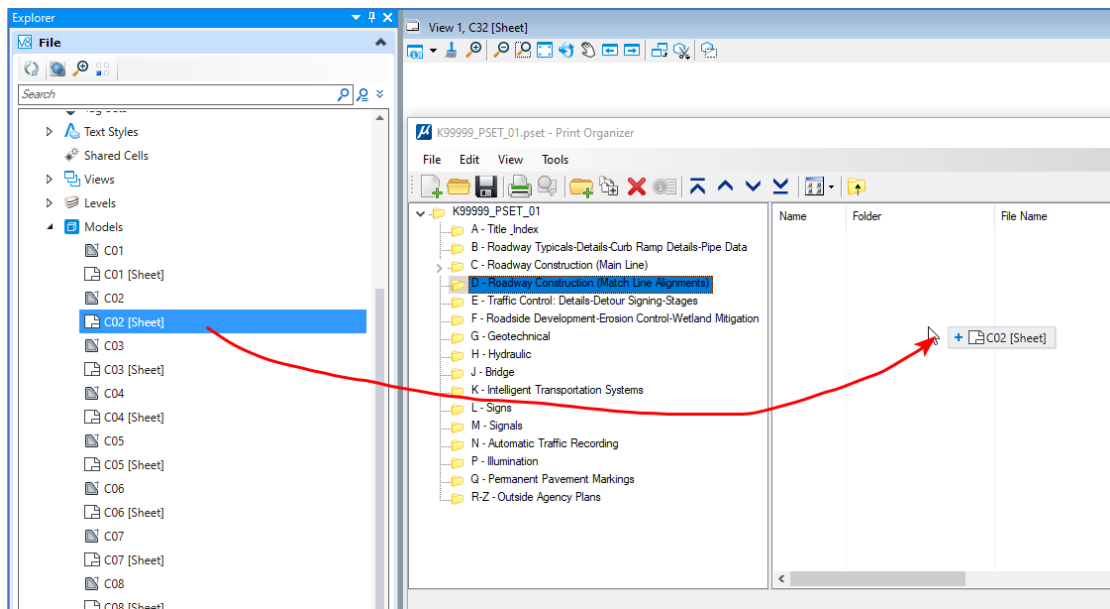
Adding Sheets to Print Organizer

From time to time, you will need to add sheets to your .pset file. If you need to add more than about 5 sheets, it is more efficient to create the new sheets in a different file and add the entire file to the print set.

Model Method to Add Sheets

When individual sheets are created in separate models, it allows for specifying one model to add to the print set using the Explorer. This method allows only one model to be added at a time.

1. Open the file containing the new sheet model.
2. Open your project PSET with Print Organizer.
3. In the Explorer File group, expand the active design file, then expand the Models category. Select and drag the new model from Explorer into the right pane of a selected folder in Print Organizer and apply a print style. This creates one additional print definition in the print set.



4. Save the print set.