

<b>R★STARS</b>	<b>Version 2.0</b>
<b>REFERENCE MANUAL SYSTEM PROCESSING OVERVIEW</b>	<b>3-1 12/94</b>

## **INTRODUCTION**

This chapter presents an overview of the processing capabilities and automated features of R★STARS. It has been developed to give the reader a general understanding of R★STARS on-line capabilities and batch processing functions. This chapter serves as a foundation for understanding how transactions are processed in R★STARS.

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### **3-1 ON-LINE PROCESSING**

The R★STARS on-line features give users the ability to enter various types of accounting, profile maintenance, and system management transactions and have them recorded immediately in the data base. Each of these types of transactions is fully edited prior to posting. The R★STARS user can use inquiry functions to retrieve records from both the R★STARS financial tables and profiles for display on the screen.

When in doubt about how to proceed, an on-line Help capability provides information about error codes, coding rules, and screen usage. The "Link To" and "Interrupt" features of R★STARS make movement between on-line functions quick and easy for the experienced user while inexperienced users have menus to guide them through on-line R★STARS functions. The R★STARS on-line user is constantly under the control of the R★STARS Security Subsystem which prevents unauthorized access to on-line functions.

The following sections present an overview of each on-line feature of R★STARS.

#### **On-line Profile Maintenance**

Profile maintenance transactions entered on-line have an immediate effect on the system. They cause on-line updates to R★STARS profiles which are used to validate data and fund edits, to provide report titles, and to control system processes.

Most R★STARS profiles have been designed to permit agencies to perform their own profile maintenance activity, however, some profiles are statewide and maintained centrally. On-line profile maintenance transactions can be entered to add, change and delete records in the R★STARS profiles.

Each profile maintenance transaction is edited on-line to provide immediate feedback on the status of the update. Any errors encountered must be corrected prior to posting the transaction to the profile. Profile maintenance is discussed in more detail in the R★STARS Data Entry Guide.

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## **On-line Accounting Transactions**

The effect of accounting transactions entered on-line can either be immediately posted to financial tables or not posted until the next batch update cycle. This is possible because R★STARS offers several options for the on-line entry of accounting transactions:

- **0** - Batch edit and post
- **1** - On-line edit, batch post
- **2** - On-line edit and post

For both edit modes '0' and '1', the effect of an accounting transaction entered on-line is not posted to the financial tables until the next batch update cycle (if the batch is released for processing). The batch cycle process is explained in more detail in Section 3-2 of this chapter. Under edit mode '0', the transaction is not edited during entry. This mode is commonly used for large volumes of on-line data entry and for batch automated interface transactions. Under edit mode '1', only data edits are performed on-line, fund control edits are performed in the nightly batch cycle. Data edits include validation edits against system profiles, such as identification of an invalid PCA. These edits also ensure that the effective date falls within an open month. During the nightly batch post process, profiles will be revalidated for any changes or updates.

Accounting transactions entered using edit mode '2' are immediately edited and if successful, posted to R★STARS financial tables. Under edit mode '2', both data and fund control edits are performed on-line. Data edits, described above, are performed to ensure that valid and reasonable data are entered on each transaction. Fund control edits ensure that the transaction does not cause available budgetary (such as appropriations) or cash balances to be over-expended and that match requirements are met ( such as a requirement that an encumbrance document which is to be liquidated exists in the system).

Transactions entered with edit mode '2' are **NOT** re-edited, or reposted during the nightly batch update process. Each user's ability to use the various input edit modes is controlled through the Security Profile (96A).

## **On-line System Management Transactions**

An important on-line feature of R★STARS is the ability to control system processing by means of the entry of system management transactions. These include transactions which request reports, generate recurring accounting transactions, close the prior accounting month or disable system functions.

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Each afternoon, before the batch update cycle is run, the R★STARS system manager(s) can review the indicator settings in the R★STARS Agency Control Profile (25) and the System Management Profile (97) to change any indicators necessary for the next batch update cycle. System management features and functions are discussed in detail in the R★STARS System Management Guide.

### **On-line Financial Table Inquiry**

On-line inquiry is provided for many of the R★STARS financial tables and is controlled by the user's security record. The user can enter a specific characteristic which uniquely identifies a record (called a key) in the data base, and if that record exists it will be retrieved and its contents displayed.

The user may specify the transaction year and accounting period to be displayed; if not the current indicators set in the System Management Profile (97) are displayed. The user may also specify either activity or cumulative balances to be displayed.

### **On-line Security**

R★STARS security requires that each user log on with a valid user ID and password. Once logged on, the user may only perform those functions authorized in his/her Security Profile (96A & 96B).

Examples of on-line functions which may be authorized through the user ID and user Class include the following:

- Financial transaction data entry for a single agency, range of agencies, or agency group for all Transaction Codes or ranges of Transaction Codes.
- Profile maintenance for a single agency, range of agencies, or agency group on a profile-by-profile basis.
- On-line inquiry to financial tables and on a screen-by-screen basis.
- Performance of specialized functions such as releasing batches and overriding cash and budgetary edits.
- Use of certain indicator values, such as the disbursement method indicator.

Whenever unauthorized functions are attempted by R★STARS users, the system displays an error message indicating the security restriction.

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The log-on user ID, date, and time are recorded in each profile maintenance, accounting, and system management transaction processed by the system to provide an audit trail of every function performed by the user.

Security is discussed in greater detail in Chapter 4 - "Security" of the R★STARS System Management Guide.

### **On-line Help, Link To and Interrupt**

R★STARS has three additional on-line facilities: Help, Link To, and Interrupt. The Help facilities are designed for use by both the novice and experienced user. They provide on-line information about error codes, data fields, and screen usage. The Help facilities are accessed by pressing F1 from any profile, inquiry or data entry screen. To exit the Help facilities, press F9.

The user may move from screen to screen through the system menus or may move quickly and easily between functions using the Link feature. Link allows the user to avoid menus. The user enters a screen number in the Link To field of the screen displayed. When the Enter key is pressed, program control is passed to the screen specified in the Link To field. This process can be repeated indefinitely.

Interrupt provides additional functionality by returning program control to the originating screen when the F9 key is pressed. When the original screen is returned, all data values present at the start of Link or Interrupt are redisplayed.

When used together, Help, Link, and Interrupt provide a powerful and efficient set of tools for the R★STARS on-line user because less time is spent moving from function to function and fewer CICS transactions are entered.

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## **3-2 BATCH PROCESSING**

The R★STARS batch processing cycle includes those procedures that are scheduled to run each business night. These procedures include the generation of transactions and reports by Miscellaneous Subsystems, edit and update of transactions in update cycle 1, payment processing, edit and update of transactions in update cycle 2, interface extract, and reporting. The following sections present an overview of each batch processing procedure in R★STARS.

### **Nightly Update Cycle**

The R★STARS nightly update cycle begins with a series of procedures which generate accounting transactions. These transactions are a major source of input to the R★STARS input, edit, update process. The procedures which generate these transactions are as follows:

- **Grant/Project Billing Subsystem** - accumulates cost information for various types of grants and projects and automatically generates accounting transactions which record the effect of billing for the cost incurred. These transactions are generated based on a schedule established by the agency and coordinated through operations personnel.
- **Recurring Transaction Subsystem** - automatically posts recurring transactions which have been scheduled and released.
- **Other Subsystems** - interface with R★STARS to generate accounting transactions. These include Fixed Assets, Cost Allocation and Labor Distribution Subsystems, as well as agency-operated systems which interface with R★STARS. *Fixed Assets and Labor Distribution Subsystems are not currently being used in Oregon.*

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The R★STARS batch update cycle is performed in two separate nightly processes:

- **Batch IEU (Input, Edit, Update) 1**
- **Batch IEU (Input, Edit, Update) 2**

Batch IEU 1 edits transactions and updates R★STARS database for those transactions entered on-line in edit mode '0' and '1', for transactions input via electronic interface, for error transactions that are reprocessed as edit mode '3' and for transactions generated by miscellaneous R★STARS Subsystems, such as Cost Allocation.

The R★STARS IEU 1 procedure is the key process in the nightly batch update cycle. It performs the following functions:

- Reads the accounting transactions generated by R★STARS and other subsystems and interfaces (including out-of-system payments).
- Rejects interface transactions that fail minimum edit criteria such as duplicate batch ID.
- Edits the accounting transactions which pass the "reject" edits.
- Reports errors detected in the accounting transactions.
- Updates financial tables with those transactions that pass all edits.
- Creates generated transactions (for allotments, payroll transfers, and CMIA).

Once the IEU 1 process is complete, the payment processes are performed. The R★STARS payment processing process performs the following functions:

- Generates warrants, direct deposits and remittance advices.
- Creates accounting transactions which are input into the next input, edit, update cycle, including back-up withholding transactions, payment liquidations, redemptions, and cancellations.
- Updates transactions on the Accounting Event Table and Internal Transaction File.

Following the payment processes the nightly batch cycle runs a second IEU which processes, edits and updates all transactions produced from the Payment Processing programs, all edit mode '4' transactions and other transactions generated from IEU 1 prior to running the nightly reporting process.

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## **Interface Extract**

R★STARS interface extract procedure reads the control tables, accounting transaction tables, and financial tables and creates interface records for R★STARS subsystems and other user systems. Among the interface extract tables which may be created is the Fixed Assets Hold File (HF), created from current valid accounting transactions which contain property numbers and capitalize indicator values. *Fixed Asset Hold File (HF) is not currently being used in Oregon.*

## **Reporting**

R★STARS provides two important reporting related functions. The first is the report request function. Using this function users may request that any of the standard reports or profile listings be produced. Many of the financial reports can be tailored to the needs of each user through a series of detail level options. Report requests that are recurring in nature, such as weekly or monthly, can be identified as such and will be run automatically by the system on the specified frequencies.

Report Distribution is the second reporting function. In addition to the Report Request Profile (91) described above, R★STARS also provides a Report Distribution Profile (95). This profile is used to specify where the report is to be routed. A separate distribution record can be made for each report request, or a standard distribution may be defined. Additional information on R★STARS reporting capabilities can be found in Chapter 10 - "Reporting" of the R★STARS Reference Manual.

This concludes the discussion on R★STARS system processing overview.

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