

z/OS



DFSMSrmm Reporting

z/OS



DFSMSrmm Reporting

Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 281.

Third Edition, March 2003

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About This Document

This document tells you how to create reports for DFSMSrmm resources. It is intended for storage administrators, system programmers, and application programmers who are responsible for implementing, customizing, and using DFSMSrmm. A section about using DFSORT™ ICETOOL symbols, which became available with DFSORT Release 14, is included. Using ICETOOL symbols can simplify report writing.

For information about the accessibility features of z/OS, for users who have a physical disability, see Appendix D, “Accessibility”, on page 279.

Required Product Knowledge

To use this document effectively, you should be familiar with:

- Using DFSMSrmm Utilities
- Using DFSORT's ICETOOL
- Using ISPF
- Writing REXX EXECs
- Using TSO Commands

Referenced Documents

The following documents have additional information about DFSMSrmm:

Document Title	Order Number
<i>z/OS DFSMSrmm Application Programming Interface</i>	SC26-7403
<i>z/OS DFSMSrmm Command Reference Summary</i>	SX26-6022
<i>z/OS DFSMSrmm Diagnosis Guide</i>	GY27-7619
<i>z/OS DFSMSrmm Guide and Reference</i>	SC26-7404
<i>z/OS DFSMSrmm Implementation and Customization Guide</i>	SC26-7405

The following documents have additional information about DFSORT:

Document Title	Order Number
<i>DFSORT Application Programming Guide Release 14</i>	SC33-4035
<i>Getting Started with DFSORT Release 14</i>	SC26-4109

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In addition to making softcopy documents available on CD-ROM, IBM provides access to unlicensed z/OS softcopy documents on the Internet. To find z/OS documents on the Internet, first go to the z/OS home page:

<http://www.ibm.com/servers/eserver/zseries/zos>

From this Web site, you can link directly to the z/OS softcopy documents by selecting the Library icon. You can also link to IBM Direct to order printed documentation.

Using LookAt to look up message explanations

LookAt is an online facility that allows you to look up explanations for most messages you encounter, as well as for some system abends and codes. Using LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can access LookAt from the Internet at:
<http://www.ibm.com/eserver/zseries/zos/bkserv/lookat/>

Alternatively, you can access LookAt from anywhere in z/OS where you can access a TSO/E command line (for example, TSO/E prompt, ISPF, z/OS UNIX System Services running OMVS). You can also download code from the *z/OS Collection* (SK3T-4269) and the LookAt Web site that will allow you to access LookAt from a handheld computer (Palm Pilot VIIx suggested).

To use LookAt as a TSO/E command, you must have LookAt installed on your host system. You can obtain the LookAt code for TSO/E from a disk on your *z/OS Collection* (SK3T-4269) or from the **News** section on the LookAt Web site.

Some messages have information in more than one document. For those messages, LookAt displays a list of documents in which the message appears.

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Notational Conventions

This section explains the notational conventions used in this document.

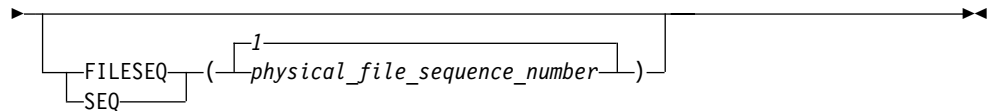
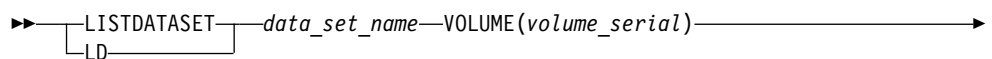
How to Read Syntax Diagrams

Throughout this library, diagrams are used to illustrate the programming syntax. Keyword parameters are parameters that follow the positional parameters. Unless otherwise stated, keyword parameters can be coded in any order. The following list tells you how to interpret the syntax diagrams:

- Read the diagrams from left-to-right, top-to-bottom, following the main path line. Each diagram begins on the left with double arrowheads and ends on the right with two arrowheads facing each other.



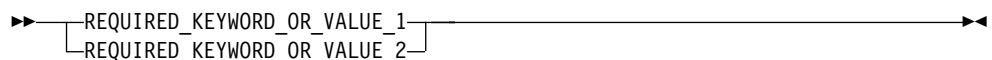
- If a diagram is longer than one line, each line to be continued ends with a single arrowhead and the next line begins with a single arrowhead.



- Required keywords and values appear on the main path line. You must code required keywords and values.



If several mutually exclusive required keywords or values exist, they are stacked vertically in alphanumeric order.



- Optional keywords and values appear below the main path line. You can choose not to code optional keywords and values.



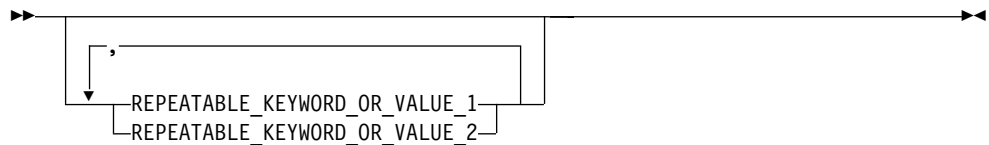
If several mutually exclusive optional keywords or values exist, they are stacked vertically in alphanumeric order below the main path line.



- An arrow returning to the left above a keyword or value on the main path line means that the keyword or value can be repeated. The comma means that each keyword or value must be separated from the next by a comma.



- An arrow returning to the left above a group of keywords or values means more than one can be selected, or a single one can be repeated.



- A word in all uppercase is a keyword or value you must spell exactly as shown. In this example, you must code **KEYWORD**.

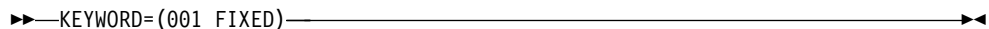


If a keyword or value can be abbreviated, the abbreviation is discussed in the text associated with the syntax diagram.

- If a diagram shows a character that is not alphanumeric (such as parentheses, periods, commas, and equal signs), you must code the character as part of the syntax. In this example, you must code **KEYWORD=(001,0.001)**.



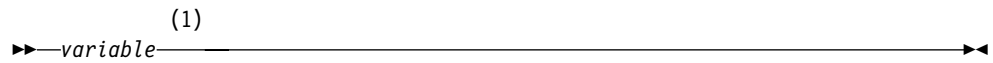
- If a diagram shows a blank space, you must code the blank space as part of the syntax. In this example, you must code **KEYWORD=(001 FIXED)**.



- Default keywords and values appear above the main path line. If you omit the keyword or value entirely, the default is used.



- A word in all lowercase italics is a *variable*. Where you see a variable in the syntax, you must replace it with one of its allowable names or values, as defined in the text.



Notes:

- 1 An example of a syntax note.
- References to syntax notes appear as numbers enclosed in parentheses above the line. Do not code the parentheses or the number.



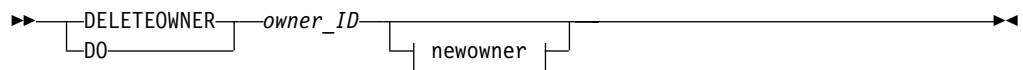
- Some diagrams contain *syntax fragments*, which serve to break up diagrams that are too long, too complex, or too repetitious. Syntax fragment names are in mixed case and are shown in the diagram and in the heading of the fragment. The fragment is placed below the main diagram.



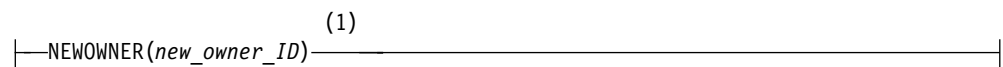
Syntax Fragment:



The following is an example of a syntax diagram.



newowner



Notes:

- 1 Must be specified if the owner owns one or more volumes.

The possible valid versions of the RMM DELETEOWNER command are:

```
RMM DELETEOWNER owner
RMM DO          owner
RMM DELETEOWNER owner NEWOWNER(new_owner)
RMM DO          owner NEWOWNER(new_owner)
```

How to Abbreviate Commands and Operands

The TSO abbreviation convention applies for all DFSMSrmm commands and operands. The TSO abbreviation convention requires you to specify as much of the command name or operand as is necessary to distinguish it from the other command names or operands.

Some DFSMSrmm keyword operands allow unique abbreviations. All unique abbreviations are shown in the command syntax diagrams.

How to Use Continuation Characters

The symbol - is used as the continuation character in this document. You can use either - or +.

- Do not ignore leading blanks on the continuation statement
- + Ignore leading blanks on the continuation statement

Delimiters

When you type a command, you must separate the command name from the first operand by one or more blanks. You must separate operands by one or more blanks or a comma. Do not use a semicolon as a delimiter because any character you enter after a semicolon is ignored.

Character Sets

To code job control statements, use characters from the character sets in Table 1. Table 2 lists the special characters that have syntactical functions in job control statements.

Table 1. Character Sets

Character Set	Contents	
Alphanumeric	Alphabetic Numeric	Capital A through Z 0 through 9
National (See note)	"At" sign Dollar sign Pound sign	@ (Characters that can be \$ represented by hexadecimal # values X'7C', X'5B', and X'7B')
Special	Comma Period Slash Apostrophe Left parenthesis Right parenthesis Asterisk Ampersand Plus sign Hyphen Equal sign Blank	, . / ' () * & + - =
EBCDIC text	EBCDIC printable character set	Characters that can be represented by hexadecimal X'40' through X'FE'
<p>Note: The system recognizes the following hexadecimal representations of the U.S. National characters; @ as X'7C'; \$ as X'5B'; and # as X'7B'. In countries other than the U.S., the U.S. National characters represented on terminal keyboards might generate a different hexadecimal representation and cause an error. For example, in some countries the \$ character may generate a X'4A'.</p>		

Table 2. Special Characters Used in Syntax

Character	Syntactical Function
,	To separate parameters and subparameters
=	To separate a keyword from its value, for example, BURST=YES
(b)	To enclose subparameter list or the member name of a PDS or PDSE
&	To identify a symbolic parameter, for example, &LIB

Table 2. Special Characters Used in Syntax (continued)

Character	Syntactical Function
&&	To identify a temporary data set name, for example, &&TEMPDS, and, to identify an in-stream or sysout data set name, for example, &&PAYOUT
.	To separate parts of a qualified data set name, for example, A.B.C., or parts of certain parameters or subparameters, for example, nodename.userid
*	To refer to an earlier statement, for example, OUTPUT=*.name, or, in certain statements, to indicate special functions: //label CNTL * //ddname DD * RESTART=* on the JOB statement
'	To enclose specified parameter values which contain special characters
(blank)	To delimit fields

Summary of Changes

This document contains terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

You might notice changes in the style and structure of some content in this document--for example, headings that are more task-oriented and procedures that have a different look and format. The changes are ongoing improvements to the consistency and retrievability of information in our documents.

Summary of Changes for SC26-7406-02 z/OS Version 1 Release 3

This document contains information that was previously presented in *z/OS Version 1 Release 3 DFSMSrmm Reporting (SC26-7406-01)*.

The following sections summarize the changes to that information.

New Information

This edition includes information about the DFSMSrmm reporting sample REPORT16 that you can use to obtain information about duplicate volumes.

Changed Information

The following information was changed in this edition:

- DFSORT symbols for use with DFSMSrmm have been updated. See Appendix A, “DFSORT Symbols for Use with DFSMSrmm”, on page 163 for the updated symbol files EDGEXTSY and EDGSMFSY.
- DFSMSrmm mapping macros have been updated. See Appendix B, “DFSMSrmm Mapping Macros”, on page 205 for changed mapping macros, EDGRDEXT, EDGRKEXT, EDGRSEXT, EDGRXEXT, EDGSDREC, and EDGSVREC.

Summary of Changes for SC26-7406-01 z/OS Version 1 Release 3

This document contains information that was previously presented in *z/OS Version 1 Release 1 DFSMSrmm Reporting (SC26-7406-00)*.

The following sections summarize the changes to that information.

New Information

This edition includes the following new information:

- DFSMSrmm provides an ISPF-based report generator. See Chapter 2, “Using the DFSMSrmm Report Generator”, on page 5 for information about how to set up the report generator.
- DFSMSrmm supports a new extract copy of the DFSMSrmm control data set that includes an extended record that combines data set and volume information.
- DFSMSrmm reporting samples have been enhanced to simplify how you work with them. See Chapter 5, “Creating Reports Using DFSMSrmm-Supplied EXECs”, on page 81 for information.

Changed Information

The following information was changed in this edition:

- DFSORT symbols for use with DFSMSrmm have been updated. See Appendix A, “DFSORT Symbols for Use with DFSMSrmm”, on page 163 for the updated symbol files EDGEXTSY and EDGSMFSY.
- DFSMSrmm mapping macros have been updated. See Appendix B, “DFSMSrmm Mapping Macros”, on page 205 for changed mapping macros, EDGRDEXT, EDGRKEXT, EDGRSEXT, EDGRXEXT, EDGSDREC, and EDGSVREC.

Chapter 1. Creating DFSMSrmm Reports

DFSMSrmm™ is a z/OS® feature. You can use different ways to create DFSMSrmm reports or get DFSMSrmm information. You should select the best approach each time you gather your information. First, identify the kind of information you need and the way you will read or present the information. You might find that RMM TSO subcommands or the DFSMSrmm ISPF dialog provides the best approach.

The RMM TSO subcommands and the DFSMSrmm ISPF dialog share some similarities. The dialog allows you to view the information in real time and in predefined formats. The dialog also allows you to decide dynamically which further details you want to view. You can use the RMM TSO subcommands to obtain the kind of information that you obtain when you use the DFSMSrmm ISPF dialog. The difference is that you cannot view the full-screen when you use the RMM TSO subcommands. You can use the commands interactively or submit them in batch. You can save the batch job input, which allows you to reuse the commands so you can run the job again.

Consider using the DFSMSrmm-supplied standard reports for reporting requirements, so that you can view online or printed reports on an impromptu or regular basis. DFSMSrmm has included many standard reports that you can create using the EDGRPTD and EDGAUD utilities or the EDGRRPTE reporting EXEC. DFSMSrmm also provides standard reports that are generated from inventory management and that cover vital record specification matching and retention, run-time statistics, and control data set change activity.

Another way to produce reports is to use a sort utility like DFSORT or DFSORT's ICETOOL. With DFSORT or DFSORT's ICETOOL, you can create customized reports from the available DFSMSrmm information, such as the extract data set, the activity file, and System Management Facility (SMF) records. Use the DFSMSrmm report generator with utilities like DFSORT's ICETOOL to create customized reports. You can create report definitions, save reporting jobs, and submit reporting jobs using the DFSMSrmm report generator.

Finally, if you need to provide information from DFSMSrmm directly into an application or product, you can use the DFSMSrmm application programming interface (API). You need high-level assembler knowledge and skills to implement the API. As a result, using the API might require more development time and resources than using other methods to obtain information from DFSMSrmm.

Using the DFSMSrmm ISPF Dialog and RMM TSO Subcommands

You can search online, using the DFSMSrmm ISPF dialog or RMM TSO subcommands, to create lists of resources and display information recorded in the DFSMSrmm control data set. Here are some examples:

- Operators can create lists of scratch volumes to be pulled for use.
- Tape librarians and system programmers can create lists of software products and the volumes on which they reside.
- General users can create lists of volumes they own, such as the example in Figure 1 on page 2:

Volume	Owner	Rack	Assigned date	Expiration date	Location	Dsets	St Act	Dest.
VOL600	AMYW01	RAC500	06/11/2000	11/11/2000	SHELF	0	UR SI	
VOL601	AMYW01	RAC501	06/11/2000	11/11/2000	SHELF	0	UR SI	
VOL603	AMYW01	RAC502	06/11/2000	11/11/2000	SHELF	0	UR SI	
EDG3011I 3 ENTRIES LISTED								

Figure 1. Example of a List of Volumes Owned by a Single User

With the DFSMSrmm ISPF Report Generator option, you can run batch reports by selecting predefined reports or creating your own custom reports. See Chapter 2, “Using the DFSMSrmm Report Generator”, on page 5 for a detailed description.

With DFSMSrmm, you can use the RMM TSO SEARCH subcommands with the CLIST operand to create a data set of executable subcommands. For example, you can create subcommands to confirm volume movement for volumes that are identified during a SEARCHVOLUME request. See *z/OS DFSMSrmm Guide and Reference* for more information about the RMM SEARCHVOLUME subcommand.

Using the DFSMSrmm Inventory Management EDGHSKP Utility

DFSMSrmm provides the EDGHSKP utility to help you perform inventory management. You can create reports as part of inventory management processing as described in Chapter 3, “Creating Inventory Management Reports”, on page 41. See *z/OS DFSMSrmm Implementation and Customization Guide* for information about DFSMSrmm inventory management processing.

Using the EDGRPTD and EDGAUD Report Utilities

You can create several types of standard reports by using the DFSMSrmm report utilities EDGRPTD and EDGAUD. See Chapter 4, “Creating Reports with DFSMSrmm Utilities”, on page 61 for additional information. Use EDGRPTD to create movement, inventory, and scratch reports and EDGAUD to create security and audit reports. EDGRPTD uses the DFSMSrmm extract data set created with EDGHSKP,PARM=RPTEXT as input. EDGAUD uses SMF records as input.

You can use the reports to perform these activities.

- Identify volumes that should be moved between the removable media library and storage locations.
- Determine your volume inventory in the removable media library and storage locations.
- Identify volumes that are in transit.
- Identify volumes that should be marked as moved.
- Identify all accesses to volumes and changes to information recorded in the DFSMSrmm control data set.
- Separate volumes that are waiting to return to scratch from those that are private or have other release actions pending.
- Identify new scratch volumes or the entire scratch inventory.

Using the DFSMSrmm EDGRRPTE EXEC

DFSMSrmm provides standard reports and samples that are shipped in SAMPLIB. Use the EDGJRPT sample job control language (JCL) to run the EDGRRPTE EXEC to produce reports, using the DFSMSrmm extract data set as input. See Chapter 5, “Creating Reports Using DFSMSrmm-Supplied EXECs”, on page 81 for additional information.

Using DFSORT and the DFSORT ICETOOL Utility

You can use DFSORT or a similar program to generate a formatted report using the DFSMSrmm extract data set, activity file, or SMF records. For example, you could produce a list of volumes on virtual machine (VM) with information about volume owners. Then use DFSORT’s ICETOOL utility to sort the information by volume and produce a report, complete with title and header information.

You can use DFSORT symbols for fields and constants to further simplify the report writing process. Using symbols increases your productivity by automatically providing the positions, lengths, and formats of the fields, and the values of the constants associated with the particular records you are processing with DFSORT and DFSORT’s ICETOOL. See Chapter 6, “Using DFSMSrmm with DFSORT”, on page 113 for further information.

Related Reading: See Chapter 2, “Using the DFSMSrmm Report Generator”, on page 5 for information about using the report generator to create customized reports. See Chapter 6, “Using DFSMSrmm with DFSORT”, on page 113 for information about using DFSMSrmm with DFSORT.

Using the DFSMSrmm Application Programming Interface

You can use the DFSMSrmm application programming interface to obtain information about the resources that are defined to DFSMSrmm. See the *z/OS DFSMSrmm Application Programming Interface* for information about how to use the DFSMSrmm application programming interface.

Chapter 2. Using the DFSMSrmm Report Generator

The DFSMSrmm report generator is an ISPF application that you can use to create reports.

- The report generator provides predefined reports that you can run as-is or that you can modify as you wish. You can use samples to create reports for volumes, data sets, racks, owners, and the retention and movement policies that are established for your installation. You can modify these samples to create tailored reports. DFSMSrmm ships samples in SYS1.SAMPLIB. See “Running a DFSMSrmm-Supplied Report” on page 7 to run one of these reports.
- The report generator generates JCL that is based on specifications that you use to submit the report jobs.

To create reports with the report generator, provide any input data along with an Assembler language mapping macro to map the input data. The DFSMSrmm samples use the DFSMSrmm extract data set, the SMF file, and the ACTIVITY file as input. DFSMSrmm mapping macros map the input data.

The report definitions and report types specify the format and contents of reports, the input files for the reports, and the tools used to create the reports. To use or modify a report, you work with report definitions as described in “Working with Report Definitions” on page 11. Create new report definitions for reports that are required by your users. Store the report definitions in the installation library to make the reports available to all your users from the installation library. To create a new report that uses input data other than the DFSMSrmm files, you work with report types as described in “Working with Report Types” on page 22.

The report generator samples use DFSORT’s ICETOOL as the default tool. The report generator creates a DFSORT ICETOOL job that you can run in batch. See “Working with Reporting Tools” on page 34 for information about specifying a tool for creating reports.

You store report definitions, report types, and the reporting tools in three separate libraries.

- The product library which contains predefined report definitions, report types, and reporting tools.
- The installation library which contains any versions that your installation has modified or created.
- The user library where any new or modified versions are stored.

The DFSMSrmm report generator also uses a JCL library to save and submit the DFSMSrmm-generated report JCL to run your reports.

Define all the libraries as partitioned data sets with fixed 80 byte records. When you do not allocate libraries, DFSMSrmm allocates the libraries automatically with a primary and secondary space of 10 tracks and 50 directory blocks. Specify the data set names as fully qualified names with single quotation marks or without quotation marks and a high-level qualifier. DFSMSrmm automatically expands the data set names to the fully qualified name including the single quotes. If you do not specify NOPREFIX in the TSO profile, DFSMSrmm uses the RACF[®], a component of the Security Server for z/OS, user ID as the high level qualifier for the data sets. See “Specifying Libraries for the Report Generator” on page 10 for information about setting up the libraries for the report generator.

Setting up the Report Generator for Your Installation

Here are steps for setting up the report generator for your installation.

1. Select the Report Options panel described in “Specifying Libraries for the Report Generator” on page 10. Specify the installation library that you want to use as your user library. If you do not allocate the library, DFSMSrmm automatically allocates the library using a primary space and secondary space of 10 tracks and 50 directory blocks
2. Specify the name of the JCL library and the product library. The product library by default is SYS1.SAMPLIB.
3. Set up the access lists for the libraries. Provide READ authority to the users of the installation libraries and the product libraries.
4. Return to the Report primary panel, and select the Report Types panel. You can optionally customize the report types shipped with DFSMSrmm and set them up for your users as described in “Working with Report Types” on page 22. You can also add new report types for data other than data that are created by DFSMSrmm. The report type is a file that contains information about a specific type of record in an input data set, the Assembler language macro that defines the record format, and basic record selection criteria. For example, the report type “Extract Records for Data Sets” in the product library contains information about the data set record in the extract data set, the EDGRDEXT mapping macro, and the minimum subset definition of records that are used in the report. Report types contain only the base information from which report definitions are created.
5. Select the Report Definition panel to customize report definitions that are shipped with the product. The report definition is a report file that contains all of the information that is needed to run a report. Each report definition in the product library, installation library, or user library contains the report type information, reporting tool information, the data fields that are used in the report, and the sort order of the records. The report selection criteria specifies the subset of records that are used for a report. The reporting tool is a REXX EXEC that builds control statements to create reports that use a reporting utility, such as DFSORT’s ICETOOL. You can change the reporting tool at any time.
6. Customize the EDGRMAIN EXEC. The REXX variable names that you can customize all start with the characters ‘cedggrdl’. Here is the section of the EDGRMAIN EXEC that you must customize.

```
/* Initialise Report library names */                /*@09A*/
address "ISPEXEC" "VGET ZPREFIX"                    /*@09A*/
If length(zprefix) = 0 then                          /*@10C*/
  edggpref = sysvar('SYSUID')                       /*@09A*/
else                                                 /*@10C*/
  edggpref = zprefix                                /*@10C*/

cedggrdlu = ""edggpref||".REPORT.LIB'" /* User Library    @10C*/
cedggrdlj = ""edggpref||".REPORT.JCL'" /* User JCL Library @10C*/
cedggrdlp = "'SYS1.SAMPLIB'"          /* Product Library  @10C*/
cedggrdli = ""                        /* Installation Library @10A*/
```

- a. Define the installation library name and optionally customize the product library name in EXEC EDGRMAIN. There is no installation library name in the EXEC, so you must add the name.
- b. Update the default naming convention in EXEC EDGRMAIN for the user library name and the JCL library name, if necessary.

Steps for Using the Report Generator

The system programmer or storage administrator might have created some specialized report definitions for your installation and placed them in the installation library. You can modify the report definitions, report types, and reporting tools that are found in the product library or the installation library. When you modify a report definition, the report generator stores the modified report definitions in your user library. You can create new report definitions from report types or from existing report definitions.

These are the steps you follow to create reports by using the report generator.

1. Verify the user library names and the JCL library names that are defined in the Report Options panel. Allocate the libraries manually or automatically as described in “Specifying Libraries for the Report Generator” on page 10.
2. Specify the product library name and the installation library name as described in “Working with Report Definitions” on page 11. Obtain the names from the person who set up the report generator for your installation.
3. Select the Report Type panel to add or to change report types shipped with DFSMSrmm as described in “Working with Report Types” on page 22.
4. Select the Report Definition panel to add or to change report definitions shipped with DFSMSrmm. See “Working with Report Definitions” on page 11 for more information.
5. Fill out the job card in the DFSMSrmm options panel
6. Create the report JCL. See “Generating and Saving Your JCL” on page 21 for more information.
7. Submit the report JCL.

Running a DFSMSrmm-Supplied Report

You can run a DFSMSrmm-supplied report that is stored in the product library by using the following procedure.

1. Ask your system programmer or storage administrator for the name of an input data set from the latest inventory management run. You need this input data set to run your report. The input data set can be a DFSMSrmm extract data set, an SMF file, or an ACTIVITY report.
2. Select the REPORT option on the DFSMSrmm User Menu panel as shown in Figure 2 on page 8. Press the ENTER key.

```

Panel  Help
-----
EDGPG@USR                      DFSMSrmm User Menu
Option ==>> R

0  OPTIONS   - Specify dialog options and defaults
1  VOLUME   - Display list of volumes
2  DATA SET - Display list of data sets
3  PRODUCTS - Display list of products
4  OWNER    - Display or change owner information
5  REQUEST  - Request a new volume
6  RELEASE  - Release an owned volume
R  REPORT   - Work with reports

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 2. Running a DFSMSrmm-Supplied Report Using the DFSMSrmm User Menu Panel

3. Type S next to the product library on the DFSMSrmm Report Definition Search panel shown in Figure 3. Press the ENTER key.

```

Panel  Help
-----
EDGPG010                      DFSMSrmm Report Definition Search
Command ==>>>

Report name . .                May be generic. Leave blank for all reports.
User id . . . .                Leave blank for all user ids.
Libraries (enter S):           Select one or more library.
    User                       Default are all defined libraries.
    Installation
    S Product

The following line commands will be available when the list is displayed:
A - Add a new report definition  D - Delete a report definition
G - Generate and save the JCL    J - Edit and manually submit the JCL
N - Copy a report definition     S - Display or change the report definition
T - Select a reporting tool

```

Figure 3. Running a DFSMSrmm-Supplied Report Using the DFSMSrmm Report Definition Search Panel

4. Type G in the S column on the DFSMSrmm Report Definitions panel to generate and save the JCL for the report that you want to run as shown in Figure 4 on page 9. Press the ENTER key.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 17 of 17
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
EDGGAUD1 SMF Audit of Volumes by Volser SMF Records for Volumes RMM
EDGGAUD2 SMF Audit of Volume by Rack SMF Records for Volumes RMM
EDGGR01  Scratch tapes by volume serial Extended Extract Records RMM
G EDGGR02  List of SCRATCH Volumes by Dat Extended Extract Records RMM
EDGGR03  Inventory List by Volume Seria Extended Extract Records RMM
EDGGR04  Inventory List by Dataset Name Extended Extract Records RMM
EDGGR06  Inventory of Volumes by Locati Extended Extract Records RMM
EDGGR07  Inventory of Dataset by Locati Extended Extract Records RMM
EDGGR08  Inventory of Bin by Location Extended Extract Records RMM
EDGGR09  Datasets in Loan Location Extended Extract Records RMM
EDGGR10  Volumes in Loan Location Extended Extract Records RMM
EDGGR11  List MultiVolume and MultiFile Extended Extract Records RMM
EDGGR12  Movement Report by Dataset Extended Extract Records RMM
EDGGR13  Movement Report by Bin Extended Extract Records RMM
EDGGR14  Movement Report by Volume Seri Extended Extract Records RMM
EDGGR15  Volume Inventory Including Vol Extended Extract Records RMM
EDGGSEC1 Report of Accesses to Secure V SMF Security Records RMM
***** Bottom of data *****

```

Figure 4. Running a DFSMSrmm-Supplied Report Using the DFSMSrmm Report Definitions Panel

5. Enter the input data set name that you received from the system programmer or storage administrator when you are prompted on the popup window as shown in Figure 5. Press the ENTER key.

```

EDGPG022

Input data set . . . 'RMM.EXTRACT'

New data set name to be stored in the report definition . . . . N (Y/N)

```

Figure 5. Running a DFSMSrmm-Supplied Report and Specifying the Input Data Set Name

6. Enter the J line command to edit and submit the JCL on the DFSMSrmm Report Definitions panel. Press the ENTER key.
7. Make any necessary changes to the DFSMSrmm-generated JCL that is displayed in the ISPF editor and enter the SAVE command to save it in your JCL library.
8. Use the SUBMIT command to submit the job for batch processing.

Specifying Libraries for the Report Generator

Follow these steps to specify the product library, installation library, or user library to be used with the report generator.

1. Select the OPTIONS option on the DFSMSrmm User Menu panel, as shown in Figure 6. Press the ENTER key.

```
Panel Help
-----
EDGP@USR                      DFSMSrmm User Menu
Option ==> 0

0  OPTIONS  - Specify dialog options and defaults
1  VOLUME  - Display list of volumes
2  DATA SET - Display list of data sets
3  PRODUCTS - Display list of products
4  OWNER   - Display or change owner information
5  REQUEST - Request a new volume
6  RELEASE - Release an owned volume
R  REPORT  - Work with reports

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 6. Selecting the Options Option on the DFSMSrmm User Menu Panel

2. Select Option 3 on the DFSMSrmm Dialog Options Menu panel as shown in Figure 7.

```
Panel Help
-----
EDGP@OPT                      DFSMSrmm Dialog Options Menu
Option ==> 3

1  USER   - Specify processing options
2  SORT   - Specify list sort options
3  REPORT - Specify report options

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 7. Selecting the Options Option on the DFSMSrmm Dialog Options Menu Panel

- Review the library names on the DFSMSrmm Report Options panel, as shown in Figure 8. This panel shows the three libraries that you use to create reports and the JCL library where your JCL is stored. DFSMSrmm initializes the default user library name and JCL library name with your user ID and a default second-level qualifier. Your system programmer or storage administrator sets up the names for the product library and the installation library when the DFSMSrmm report generator is installed. You can change the product library name, installation library name, and the user library name. Use the END command to save your changes.

```

Panel Help
-----
EDGP@OP3          DFSMSrmm Report Options
Command ==>>>

Report definition libraries:
User . . . . . 'D094746.REPORT.LIB'
Installation . . . . .
Product . . . . . 'SYS1.SAMPLIB'

User report JCL library . 'D094746.REPORT.JCL'

DFSMSrmm allocates user libraries if they do not exist.

```

Figure 8. Specifying Library Names on the DFSMSrmm Report Options Panel

Working with Report Definitions

You use report definitions to create reports with the report generator.

- Select the REPORT option on the DFSMSrmm User Menu panel as shown in Figure 9. Press the ENTER key.

```

Panel Help
-----
EDGP@USR          DFSMSrmm User Menu
Option ==>>> R

0 OPTIONS      - Specify dialog options and defaults
1 VOLUME      - Display list of volumes
2 DATA SET   - Display list of data sets
3 PRODUCTS    - Display list of products
4 OWNER       - Display or change owner information
5 REQUEST     - Request a new volume
6 RELEASE     - Release an owned volume
R REPORT      - Work with reports

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 9. Selecting the Report Option on the DFSMSrmm User Menu Panel

2. Type S next to the libraries that you want to search on the DFSMSrmm Report Definition Search panel as shown in Figure 10. Press the ENTER key. You can search for a report definition by name or by user ID. If you select more than one library and press the ENTER key, DFSMSrmm searches the libraries starting with the user library, the installation library, and then the product library. If DFSMSrmm finds duplicate report definition names, DFSMSrmm ignores all subsequent report definitions in the DFSMSrmm report definition list.

```

Panel  Help
-----
EDGPG010          DFSMSrmm Report Definition Search
Command ==>>>

Report name . . .      May be generic.  Leave blank for all reports.
User id . . . . .      Leave blank for all user ids.

Libraries (enter S):   Select one or more library.
  S User                Default are all defined libraries.
  Installation
  S Product

The following line commands will be available when the list is displayed:
A - Add a new report definition  D - Delete a report definition
G - Generate and save the JCL    J - Edit and manually submit the JCL
N - Copy a report definition     S - Display or change the report definition
T - Select a reporting tool

```

Figure 10. Searching for Report Definitions Using the DFSMSrmm Report Definition Search Panel

3. Enter a line command in the S column on the DFSMSrmm Report Definitions panel, as shown in Figure 11 on page 13 to perform one of the following actions.
 - A** Add a report definition to your user library. See “Adding a Report Definition” on page 13.
 - D** Delete a report definition from your user library. See “Deleting a Report Definition” on page 20. If you delete a report definition that resides in the installation library or product library, the report definition is only removed from the report definition list, not from the library itself.
 - G** Generate and save the JCL to run the report. See “Generating and Saving Your JCL” on page 21.
 - J** Edit and submit the report definition for batch processing. See “Running Your Report” on page 22.
 - N** Create a new report definition that uses an existing one. See “Modifying an Existing Report Definition” on page 20.
 - S** Display or change a report definition. To change a report definition, see “Changing a Report Definition” on page 17. If you change a report definition that resides in the installation library or product library, DFSMSrmm stores the changed report definition in your user library, not the installation library or product library.
 - T** Select the reporting tool that you want to use for your report. See “Working with Reporting Tools” on page 34. If you change a report definition that resides in the installation library or product library,

DFSMSrmm stores the changed report definition in your user library, not the installation library or product library.

```

Panel  Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 17 of 17
Command ==>>>                               Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
EDGGAUD1 SMF Audit of Volumes by Volser SMF Records for Volumes RMM
EDGGAUD2 SMF Audit of Volume by Rack SMF Records for Volumes RMM
EDGGR01  Scratch tapes by volume serial Extended Extract Records D094746
EDGGR02  List of SCRATCH Volumes by Dat Extended Extract Records RMM
EDGGR03  Inventory List by Volume Seria Extended Extract Records RMM
EDGGR04  Inventory List by Dataset Name Extended Extract Records RMM
EDGGR06  Inventory of Volumes by Locati Extended Extract Records RMM
EDGGR07  Inventory of Dataset by Locati Extended Extract Records RMM
EDGGR08  Inventory of Bin by Location  Extended Extract Records RMM
EDGGR09  Datasets in Loan Location     Extended Extract Records RMM
EDGGR10  Volumes in Loan Location     Extended Extract Records RMM
EDGGR11  List MultiVolume and MultiFile Extended Extract Records RMM
EDGGR12  Movement Report by Dataset   Extended Extract Records RMM
EDGGR13  Movement Report by Bin       Extended Extract Records RMM
EDGGR14  Movement Report by Volume Seri Extended Extract Records RMM
EDGGR15  Volume Inventory Including Vol Extended Extract Records RMM
EDGSEC1  Report of Accesses to Secure V SMF Security Records RMM
***** Bottom of data *****

```

Figure 11. Selecting a Report Definition Using the DFSMSrmm Report Definitions Panel

Adding a Report Definition

To add a new report definition, you can modify an existing report definition or you can create a new report definition. To use an existing report definition, see “Modifying an Existing Report Definition” on page 20. To add a new report definition to your library, follow this procedure.

1. Type A in the S column for any report on the DFSMSrmm Report Definitions panel as shown in Figure 12 on page 14. Press the ENTER key.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 16 of 16
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
EDGGAUD1 SMF Audit of Volumes by Volser SMF Records for Volumes RMM
EDGGAUD2 SMF Audit of Volume by Rack SMF Records for Volumes RMM
A EDGGR02 List of SCRATCH Volumes by Dat Extended Extract Records RMM
EDGGR03 Inventory List by Volume Seria Extended Extract Records RMM
EDGGR04 Inventory List by Dataset Name Extended Extract Records RMM
EDGGR06 Inventory of Volumes by Locati Extended Extract Records RMM
EDGGR07 Inventory of Dataset by Locati Extended Extract Records RMM
EDGGR08 Inventory of Bin by Location Extended Extract Records RMM
EDGGR09 Datasets in Loan Location Extended Extract Records RMM
EDGGR10 Volumes in Loan Location Extended Extract Records RMM
EDGGR11 List MultiVolume and MultiFile Extended Extract Records RMM
EDGGR12 Movement Report by Dataset Extended Extract Records RMM
EDGGR13 Movement Report by Bin Extended Extract Records RMM
EDGGR14 Movement Report by Volume Seri Extended Extract Records RMM
EDGGR15 Volume Inventory Including Vol Extended Extract Records RMM
EDGGSEC1 Report of Accesses to Secure V SMF Security Records RMM
***** Bottom of data *****

```

Figure 12. Adding a Report Definition Using the DFSMSrmm Report Definitions Panel

2. Enter a one to eight character report name on the popup window that DFSMSrmm displays as shown in Figure 13. Press the ENTER key.

```

EDGPG021

Enter the report name . . . . SCR VOL

```

Figure 13. Adding a Report Definition and Specifying a Report Name

3. Type S in the S column on the Select Report Type panel shown in Figure 14 to select the report type you want to use for the new report. Press the ENTER key.

```

Panel Help
-----
EDGPG030          Select Report Type          Row 1 to 12 of 17
Command ==>>>          Scroll ==>> PAGE

S Report type          Name
-----
Extended Extract Records EDGRXEXT
Extract Records for Bins EDGRSEXT
Extract Records for Data Sets EDGRDEXT
Extract Records for Owners EDGROEXT
Extract Records for Products EDGRPEXT
Extract Records for Racks EDGRREXT
S Extract Records for Volumes EDGRVEXT
Extract Records for VRSS EDGRKEXT
HSKP ACTIVITY file records EDGACTRC
SMF Records for Bins EDGSSREC
SMF Records for Data Sets EDGSDREC
SMF Records for Owners EDGSOREC

```

Figure 14. Adding a Report Definition Using the Select Report Type Panel

- Type S in the S column on the Select Reporting Tool panel as shown in Figure 15 to select the reporting tool that you want to use for the new report. Press the ENTER key.

```

Panel Help
-----
EDGPG040          Select Reporting Tool      Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

S Reporting tool
-----
S ICETOOL
  ICETOOL with totals line
***** Bottom of data *****

```

Figure 15. Adding a Report Definition Using the Select Reporting Tool Panel

- Select the fields that you want in your report by typing a number in the CO column. Begin with the number 1 on the DFSMSrmm Report Definition panel, as shown in Figure 16.

```

Panel Help
-----
EDGPG050          DFSMSrmm Report Definition - SCRVL0      Row 1 to 18 of 115
Command ==>>>          Scroll ==>> PAGE

Report title . . . Scratch Volume List
Report footer . . IBM Internal
Reporting tool . : ICETOOL                                Report width: 187

Use END to save changes, NOSAVE to ignore
Select a field name with S to specify a field selection criterion

S CO SO  Field name          Column header text          CW Len Typ
-----
S  G  1A RVLCDATE            LAST CHANGE DATE of volume recor      32 10 C
   1  RVPVLSER              VOLUME SERIAL NUMBER                20  6 C
   2  RVLCTIME              LAST CHANGE TIME HHMMSS of          26  6 C
   3  RVEXPDTO              EXPIRATION DATE - original           27 10 C
S   4  RVEXPDT              EXPIRATION DATE - current            26 10 C
   5  RVLGUID              LAST CHANGE USER ID of volume        29  8 C
   6  RVDSNAM1             FIRST FILE DATA SET NAME            44 44 C
S   RVTYP                  RECORD TYPE - 'V'                    18  1 C
   RVPVOL                  PREVIOUS VOLUME IN SEQUENCE          27  6 C
   RVNVOL                  NEXT VOLUME IN SEQUENCE               23  6 C
   RVMDMVID                MULTI-DSET MULT-VOL ID               22  8 C
   RVCRDATE                CREATE DATE of volume record          28 10 C
   RVCRTIME                CREATE TIME HHMMSS of volume rec      32  6 C
   RVCRSID                 CREATE SYSTEM ID of volume recor      32  8 C
   RVLCSID                 LAST CHANGE SYSTEM ID of volume       31  8 C
   RVDEN                   RECORDING DENSITY                     17  4 C
   RVCMP                   COMPACTION USED - Y/N                 21  1 C
   RVDSNNO                 NUMBER OF DATASETS ON VOLUME          28  4 C

```

Figure 16. Adding a Report Definition Using the DFSMSrmm Report Definition Panel

The order is left to right across the report. The report definition name for the report that you selected appears in the title of the DFSMSrmm Report Definition panel. The panel displays the Report title, the Report footer, and the Reporting tool for this report. To group your data and produce a page break when the data content of the group field changes, enter a G (Group) in the CO column for the field name. Group field names do not appear as columns on the report, but appear as field names in the report header.

Enter the sort fields in numerical order, beginning with the number 1 in the SO (Sort Order) column. Then enter the direction of the sorted data. Specify A for ascending order and D for descending order. Sort fields are not restricted to fields included in the report. Since the data for a group field must be in sorted sequence, this field must have a sort entry in the SO column. For example, the report definition that is defined on this panel has six columns of data. The left-hand column contains the volume serial number. The right-hand column contains the data set name of the first file on the volume. The data is grouped by the last change date of the volume record with the earliest date appearing at the top of the report and a new page printed when the date changes.

Type S in the S column on one or more fields to select a subset of input records for your report and press the ENTER key.

- Enter the record selection criteria on the DFSMSrmm Report Criteria panel, as shown in Figure 17, to select a subset of the input records for your report. DFSMSrmm only includes the records that meet the criteria that you specify as input to your report. Use the Op (Operator) column to specify the logical operator that you want to use for comparing the field contents with the values in the Compare value(s) column. Use the Compare value(s) column to specify the values that you want to compare. Type the exact value that you want to compare because the comparisons are case sensitive. If you enter more than 40 characters, use the I line command in the S column to add more values on the DFSMSrmm Report Criteria panel, as shown in Figure 17. If you want to use the same field for a second criteria, press the END key after you have specified all compare values and select the field name again. DFSMSrmm displays the existing criteria and the field you selected. Press the PF1 key with the cursor on any input field to display a help panel that describes the field and the values that you can use.

```

Panel Help
-----
EDGPG060          DFSMSrmm Report Criteria - SCRVL0          Row 1 to 3 of 3
Command ==>>>          Scroll ==>> PAGE

Report title : Scratch Volume List

Use END to save changes, NOSAVE to ignore
The following line commands are valid: B,D,I,N,P,R, and T
Comparison operators: EQ =, NE <>, GT >, GE >=, LT <, LE <=, IN, BW
Conjunction: AND, OR, AND(, )AND

S Field name          Op Compare value(s)          Conj Len Typ
-----
I RVLCDATE           IN 1999/12/31,2000/01/31,2000/03/31,2000/0 AND 10 C
RVEXPDT             BW 1999/01/01,2000/12/31          AND 10 C
RVTYPE              EQ V                              AND 1 C
***** Bottom of data *****

```

Figure 17. Adding a Report Definition Using the DFSMSrmm Report Criteria Panel

- Figure 18 on page 17 shows the values you have specified.

```

EDGPG061      DFSMSrmm Report Criteria Details - SCR VOL

Field name . . . . : RVLCDATE
Operation . . . . : IN
Compare value(s) . . 1999/12/31,2000/01/31,2000/03/31,2000/04/30,
Compare value(s) . . 2000/05/31
Conjunction . . . . : AND
Length . . . . . : 10

Type . . . . . : C

```

Figure 18. Adding a Report Definition Using the DFSMSrmm Report Criteria Details Panel

Add, change, or delete any of the values on this panel and press the ENTER key to show your changes on the DFSMSrmm Report Criteria panel, as shown in Figure 17 on page 16.

8. Press the END key on the DFSMSrmm Report Criteria panel, as shown in Figure 17 on page 16, to save the report criteria and return to the DFSMSrmm Report Definitions panel that was shown in Figure 12 on page 14.

Related Reading: To select another reporting tool to create your report, see “Working with Reporting Tools” on page 34. To generate and save the JCL to run your report, see “Generating and Saving Your JCL” on page 21. To edit the JCL and submit the report for batch processing, see “Running Your Report” on page 22.

Changing a Report Definition

To change a report definition and save it in your user library, follow this procedure.

1. Type S in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 19. Press the ENTER key. If you change a report definition that resides in the product library or installation library, DFSMSrmm adds the changed report definition to your user library.

```

Panel Help
-----
EDGPG020      DFSMSrmm Report Definitions      Row 1 to 2 of 2
Command ==>>      Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title      Report type      User id
-----
EDGGR01  Scratch tapes by volume serial  Extended Extract Records  D094746
S SCR VOL  Scratch Volume List      Extract Records for Volumes  D094746
***** Bottom of data *****

```

Figure 19. Changing a Report Definition Using the DFSMSrmm Report Definitions Panel

2. Select the fields that you want in your report by typing a number in the CO column. Begin with the number 1 on the DFSMSrmm Report Definition panel, as shown in Figure 20 on page 18. The fields are ordered from left to right across

the report. The report definition name for the report that you selected appears in the title of the DFSMSrmm Report Definition panel. The panel displays the Report title, the Report footer, and the Reporting tool for this report. To group your data and produce a page break when the data content of the group field changes, enter a G (Group) in the CO column for the field name. Group field names do not appear as columns on the report, but appear as field names in the report header.

3. Enter the sort fields in numerical order, beginning with the number 1 in the SO (Sort Order) column. Then enter the direction of the sorted data. Because the data for a group field must be in sorted sequence, this field must have a sort entry in the SO column. For example, the report definition that is defined on this panel has six columns of data. The left-hand column contains the volume serial number. The right-hand column contains the data set name of the first file on the volume. The data is grouped by the last change date of the volume record with the earliest date appearing at the top of the report and a new page printed when the date changes.
4. Type S in the S column on one or more fields to select a subset of input records for your report and press the ENTER key.

```

Panel Help
-----
EDGPG050          DFSMSrmm Report Definition - SCR VOL      Row 1 to 18 of 115
Command ==>>>                               Scroll ==>>> PAGE

Report title . . . Scratch Volume List
Report footer . . IBM Internal
Reporting tool . : ICETOOL                      Report width: 187

Use END to save changes, NOSAVE to ignore
Select a field name with S to specify a field selection criterion

S CO SO  Field name          Column header text          CW Len Typ
-----
  G 1A RVLCDATE              LAST CHANGE DATE of volume recor  32 10 C
  1  RVLCDATE              LAST CHANGE DATE of volume recor  32 10 C
  1  RVLCDATE              LAST CHANGE DATE of volume recor  32 10 C
  2  RVLCTIME              LAST CHANGE TIME HHMMSS of      26  6 C
  3  RVEXPDTO              EXPIRATION DATE - original      27 10 C
  4  RVEXPDT               EXPIRATION DATE - current       26 10 C
  5  RVLGUID               LAST CHANGE USER ID of volume   29  8 C
  6  RVDSNAM1              FIRST FILE DATA SET NAME       44 44 C
S   RVTYP                  RECORD TYPE - C'V'              18  1 C
   RVPVOL                  PREVIOUS VOLUME IN SEQUENCE     27  6 C
   RVNVOL                  NEXT VOLUME IN SEQUENCE         23  6 C
   RVMDMVID                MULTI-DSET MULT-VOL ID         22  8 C
   RVCRRDATE               CREATE DATE of volume record    28 10 C
   RVCRTIME                CREATE TIME HHMMSS of volume rec  32  6 C
   RVCRSID                 CREATE SYSTEM ID of volume recor  32  8 C
   RVLCSID                 LAST CHANGE SYSTEM ID of volume  31  8 C
   RVDEN                   RECORDING DENSITY               17  4 C
   RVCOMP                  COMPACTION USED - Y/N           21  1 C
   RVDSNNO                 NUMBER OF DATASETS ON VOLUME    28  4 C

```

Figure 20. Changing a Report Definition Using the DFSMSrmm Report Definition Panel

5. Enter the record selection criteria on the DFSMSrmm Report Criteria panel, as shown in Figure 21 on page 19, to select a subset of the input records for your report. DFSMSrmm uses the records that meet your criteria as input to your report. Use the S column to order the listed fields from top to bottom or to add or change the record selection criteria. Use the Op (Operator) column to specify the logical operator that you want to use for comparing the field contents with the values in the Compare value(s) column. Use the Compare value(s) column to specify the values that you want to compare. Type the exact value you want to compare because the comparisons are case sensitive. If you enter more than

40 characters, use the I line command in the S column to add more values on the DFSMSrmm Report Criteria Details panel, as shown in Figure 22. Use the Conj (Conjunction) column to specify how the fields are logically connected.

```

Panel  Help
-----
EDGPG060          DFSMSrmm Report Criteria - SCR VOL          Row 1 to 4 of 4
Command ==>>>          Scroll ==>> PAGE

Report title : Scratch Volume List

Use END to save changes, NOSAVE to ignore
The following line commands are valid: B,D,I,N,P,R, and T
Comparison operators: EQ =, NE <>, GT >, GE >=, LT <, LE <=, IN, BW
Conjunction: AND, OR, AND(, )AND

S Field name          Op Compare value(s)          Conj Len Typ
-----
I RVLCDATE           IN 1999/12/31,2000/01/31,2000/03/31,2000/0 AND 10 C
  RVEXPDT           BW 1999/01/01,2000/12/31          AND 10 C
  RVTYPE            EQ V                              AND  1 C
  RVTYPE            EQ V                              AND  1 C
***** Bottom of data *****

```

Figure 21. Changing a Report Definition Using the DFSMSrmm Report Criteria Panel

6. Add, change, or delete any of the values on the panel shown in Figure 22 and press the ENTER key. Your changes are displayed on the DFSMSrmm Report Criteria panel, as shown in Figure 21.

```

EDGPG061          DFSMSrmm Report Criteria Details - SCR VOL

Field name . . . . : RVLCDATE
Operation . . . . : IN
Compare value(s) . . 1999/12/31,2000/01/31,2000/03/31,2000/04/30,
Compare value(s) . . 2000/05/31
Conjunction . . . . : AND
Length . . . . . : 10
Type . . . . . : C

```

Figure 22. Changing a Report Definition Using the DFSMSrmm Report Criteria Details Panel

7. Press the END key on the DFSMSrmm Report Criteria panel, as shown in Figure 21, to save the report criteria and return to the DFSMSrmm Report Definitions panel that was shown in Figure 19 on page 17.

Related Reading: To select another reporting tool to create your report, see “Working with Reporting Tools” on page 34. To generate and save the JCL to run your report, see “Generating and Saving Your JCL” on page 21. To edit the JCL and submit the report for batch processing, see “Running Your Report” on page 22.

Modifying an Existing Report Definition

To modify an existing report definition, follow this procedure.

1. Type N in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 23. Press the ENTER key.

```
Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 2 of 2
Command ==>          Scroll ==> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
EDGGR01    Scratch tapes by volume serial  Extended Extract Records  D094746
N SCRVO1    Scratch Volume List            Extract Records for Volumes D094746
***** Bottom of data *****
```

Figure 23. Copying a Report Definition Using the DFSMSrmm Report Definitions Panel

2. Enter a one to eight character report name in the popup window that DFSMSrmm displays as shown in Figure 24. Press the ENTER key to save the copy in your user library.

```
EDGPG021

Enter the report name . . . . SCRALL
```

Figure 24. Copying a Report Definition and Specifying a Report Name

DFSMSrmm creates a new entry in the report definition list for the report name that you have specified. You can now process the new entry with the available line commands, such as 'S' which enables you to modify the copied report definition.

Related Reading: To select another reporting tool to create your report, see "Working with Reporting Tools" on page 34. To generate and save the JCL to run your report, see "Generating and Saving Your JCL" on page 21. To edit the JCL and submit the report for batch processing, see "Running Your Report" on page 22.

Deleting a Report Definition

To delete a report definition from your library, follow this procedure.

1. Type D in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 25 on page 21. Press the ENTER key. If you delete a report definition that resides on the product library or installation library, DFSMSrmm removes the report from the DFSMSrmm report definition list, not from the library itself.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 3 of 3
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
  EDGGR01   Scratch tapes by volume serial Extended Extract Records  D094746
  D SCRALL  Scratch Volume List          Extract Records for Volumes  D094746
  SCRVOL    Scratch Volume List          Extract Records for Volumes  D094746
***** Bottom of data *****

```

Figure 25. Deleting a Report Definition Using the DFSMSrmm Report Definitions Panel

2. Confirm the delete request on the popup window as shown on the panel in Figure 26. Press the ENTER key to remove the report definition from your user library.

```

EDGPG023

Name . . : SCRALL
Use ENTER to confirm the Delete, else Cancel.

```

Figure 26. Deleting a Report Definition and Confirming the Delete

Generating and Saving Your JCL

To generate and save the JCL to run your report, follow this procedure.

1. Type G in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 27. Press the ENTER key.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
  EDGGR01   Scratch tapes by volume serial Extended Extract Records  D094746
  G SCRVOL  Scratch Volume List          Extract Records for Volumes  D094746
***** Bottom of data *****

```

Figure 27. Generating and Saving Your JCL Using the DFSMSrmm Report Definitions Panel

2. Enter the input data set name that you received from the system programmer or the storage administrator in the popup window as shown in Figure 28 on page 22. Press the ENTER key.

```

EDGPG022

Input data set . . . 'RMM.EXTRACT'

New data set name to be stored in the report definition . . . . N (Y/N)

```

Figure 28. Specifying the Input Data Set Name

To edit the JCL and submit the report for batch processing, see “Running Your Report”.

Running Your Report

To run your report, follow this procedure.

1. Type J in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 29. Press the ENTER key.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
EDGGR01    Scratch tapes by volume serial  Extended Extract Records  D094746
J SCR VOL   Scratch Volume List           Extract Records for Volumes D094746
***** Bottom of data *****

```

Figure 29. Running Your Report Using the DFSMSrmm Report Definitions Panel

2. Make any necessary changes to the DFSMSrmm-generated JCL displayed in the ISPF editor and enter the SAVE command to save it in your JCL library.
3. Use the SUBMIT command to submit the job for batch processing.

Working with Report Types

A report type contains information about a specific record type in the control data set, the mapping macro that defines the record format, and the record selection criteria that is used to select records for a report. Use the DFSMSrmm Command Menu or enter the fastpath command REPORT on any ISPF panel to manage report types.

Creating a Report Type

To create a report type, follow this procedure.

1. Type R on the DFSMSrmm Command Menu as shown in Figure 30 on page 23 to select the Report option. Press the ENTER key.


```

Panel Help
-----
EDGPG000                                DFSMSrmm Command Menu
Option ==> R

0 OPTIONS - Specify dialog options and defaults
1 VOLUME - Volume commands
2 RACK - Rack and bin commands
3 DATA SET - Data set commands
4 OWNER - Owner commands
5 PRODUCT - Product commands
6 VRS - Vital record specifications
7 CONTROL - Display system control information
R REPORT - Report generator

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 30. DFSMSrmm Command Menu

2. Select the REPORT TYPE option on the DFSMSrmm Report Generator panel as shown in Figure 31. Press the ENTER key.

```

Panel Help
-----
EDGPG000                                DFSMSrmm Report Generator
Option ==> 2

0 OPTIONS - Specify dialog options and defaults
1 REPORT - Work with reports
2 REPORT TYPE - Work with report types
3 REPORTING TOOL - Work with reporting tools

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 31. DFSMSrmm Report Generator Panel

3. Enter a line command in the S column on the DFSMSrmm Report Types panel, as shown in Figure 32 on page 24, to perform one of the following actions:
 - A** Add a new report type to your library. See “Adding a Report Type” on page 24.
 - C** Change a report type in your library. See “Changing a Report Type” on page 26.
 - D** Delete a report type from your library. See “Deleting a Report Type” on page 27.
 - R** Add a new report from an existing report type. See “Adding a New Report Definition from a Report Type” on page 28.
 - S** Specify new report type criteria. See “Specifying Report Type Criteria” on page 31.

```

Panel Help
-----
EDGPG200                      DFSMSrmm Report Types                      Row 1 to 4 of 17
Command ==>>>                                     Scroll ==>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
EDGRXEXT Extended Extract Records
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRXEXT
Input data set. . : 'RMM.EXTRACT'
-----
EDGRSEXT Extract Records for Bins
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRSEXT
Input data set. . : 'RMM.EXTRACT'
-----
EDGRDEXT Extract Records for Data Sets
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRDEXT
Input data set. . : 'RMM.EXTRACT'
-----
EDGROEXT Extract Records for Owners
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGROEXT
Input data set. . : 'RMM.EXTRACT'
-----

```

Figure 32. DFSMSrmm Report Types Panel

Adding a Report Type

To add a new report type to your library, follow this procedure. Refer to “Specifying Report Type Criteria” on page 31 for information about adding basic record selection criteria for this report type.

1. Type A in the S column to select a report type on the DFSMSrmm Report Types panel as shown in Figure 33 on page 25. Press the ENTER key to display the Add a Report Type panel, as shown in Figure 34 on page 25.

```

Panel Help
-----
EDGPG200          DFSMSrmm Report Types          Row 1 to 4 of 17
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
A EDGRXEXT Extended Extract Records
  Macro library . . : 'SYS1.MACLIB'
  Applicable macros : EDGRXEXT
  Input data set. . : 'RMM.EXTRACT'
-----
EDGRSEXT Extract Records for Bins
  Macro library . . : 'SYS1.MACLIB'
  Applicable macros : EDGRSEXT
  Input data set. . : 'RMM.EXTRACT'
-----
EDGRDEXT Extract Records for Data Sets
  Macro library . . : 'SYS1.MACLIB'
  Applicable macros : EDGRDEXT
  Input data set. . : 'RMM.EXTRACT'
-----
EDGROEXT Extract Records for Owners
  Macro library . . : 'SYS1.MACLIB'
  Applicable macros : EDGROEXT
  Input data set. . : 'RMM.EXTRACT'
-----

```

Figure 33. Adding a Report Type Using the DFSMSrmm Report Types Panel

2. Enter a report type name and overwrite any other field on the DFSMSrmm Report Type panel as shown in Figure 34. Press the ENTER key to save the new report type in your user library. You can enter the input data set name later. DFSMSrmm prompts you to enter the input data set name when you generate and save your JCL or when you submit your report for processing. Ensure that you store any macro that you specify in the macro library before you define report type criteria or generate a report.

```

EDGPG230          Add a Report Type

Report type name . . SCR VOL
Description . . . . Scratch Volume Records
Macro library . . . . 'SYS1.MACLIB'
Applicable macros . . EDGRVEXT
RDW in 1st macro . . N (Y/N)
Input data set . . . 'RMM.EXTRACT'

```

Figure 34. Adding a Report Type Using the Add a Report Type Panel

Changing a Report Type

To change a report type in your library, follow this procedure. Refer to “Specifying Report Type Criteria” on page 31 for information about adding basic record selection criteria for this report type.

1. Type C in the S column to select a report type on the DFSMSrmm Report Types panel as shown in Figure 35. Press the ENTER key to display the Change a Report Type panel as shown in Figure 36 on page 27.

```
Panel Help
-----
EDGPG200          DFSMSrmm Report Types          Row 10 to 13 of 18
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
C SCR VOL   Scratch Volume Records
  Macro library . . : 'SYS1.MACLIB'
  Applicable macros : EDGRVEXT
  Input data set. . : 'RMM.EXTRACT'
-----
EDGSSREC SMF Records for Bins
  Macro library . . : 'SYS1.MODGEN'
  Applicable macros : EDGSMFAR EDGSSREC
  Input data set. . : 'RMM.SMFAUD'
-----
EDGSDREC SMF Records for Data Sets
  Macro library . . : 'SYS1.MODGEN'
  Applicable macros : EDGSMFAR EDGSDREC
  Input data set. . : 'RMM.SMFAUD'
-----
EDGSOREC SMF Records for Owners
  Macro library . . : 'SYS1.MODGEN'
  Applicable macros : EDGSMFAR EDGSOREC
  Input data set. . : 'RMM.SMFAUD'
-----
```

Figure 35. Changing a Report Type Using the DFSMSrmm Report Types Panel

2. Overwrite any field except the report type name field on the DFSMSrmm Report Type panel as shown in Figure 36 on page 27. Press the ENTER key to save the changed report type in your user library. DFSMSrmm prompts you to enter the input data set name when you generate and save your JCL or when you submit your report for processing. If you change a report type that resides in the product library or installation library, DFSMSrmm adds the changed report type to your user library.

```

EDGPG240          Change a Report Type

Report type name . . : SCRVOL
Description . . . . . Scratch Volume Records
Macro library . . . . 'SYS1.MACLIB'
Applicable macros . . EDGRXEXT
RDW in 1st macro . . N (Y/N)
Input data set . . .

```

Figure 36. Changing a Report Type Using the Change a Report Type Panel

Deleting a Report Type

To delete a report type from your library, follow this procedure.

1. Type D in the S column for a report type that is displayed on the DFSMSrmm Report Types panel as shown in Figure 37. Press the ENTER key.

```

Panel Help
-----
EDGPG200          DFSMSrmm Report Types          Row 10 to 13 of 18
Command ==>>>                                     Scroll ==>>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
D SCRVOL    Scratch Volume Records
            Macro library . . : 'SYS1.MACLIB'
            Applicable macros : EDGRXEXT
            Input data set. . :

-----
EDGSSREC    SMF Records for Bins
            Macro library . . : 'SYS1.MODGEN'
            Applicable macros : EDGSMFAR EDGSSREC
            Input data set. . : 'RMM.SMFAUD'

-----
EDGSDREC    SMF Records for Data Sets
            Macro library . . : 'SYS1.MODGEN'
            Applicable macros : EDGSMFAR EDGSDREC
            Input data set. . : 'RMM.SMFAUD'

-----
EDGSOREC    SMF Records for Owners
            Macro library . . : 'SYS1.MODGEN'
            Applicable macros : EDGSMFAR EDGSOREC
            Input data set. . : 'RMM.SMFAUD'

-----

```

Figure 37. Deleting a Report Type Using the DFSMSrmm Report Types Panel

2. Confirm the delete request on the popup window as shown in Figure 38 on page 28. Press the ENTER key to remove the report type from your user library.

If you delete a report type that resides in the product library or the installation library, DFSMSrmm removes the report type from the report type list. DFSMSrmm does not remove the report type from the library.

```
EDGPG023
Name . . : SCRVOL
Use ENTER to confirm the Delete, else Cancel.
```

Figure 38. Deleting a Report Type and Confirming the Delete

Adding a New Report Definition from a Report Type

To add a new report definition from an existing report type, follow this procedure.

1. Type R in the S column for a report type on the DFSMSrmm Report Types panel as shown in Figure 39. Press the ENTER key.

```
Panel Help
-----
EDGPG200          DFSMSrmm Report Types          Row 1 to 4 of 17
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
EDGRXEXT Extended Extract Records
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRXEXT
Input data set. . : 'RMM.EXTRACT'
-----
EDGRSEXT Extract Records for Bins
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRSEXT
Input data set. . : 'RMM.EXTRACT'
-----
R EDGRDEXT Extract Records for Data Sets
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGRDEXT
Input data set. . : 'RMM.EXTRACT'
-----
EDGROEXT Extract Records for Owners
Macro library . . : 'SYS1.MACLIB'
Applicable macros : EDGROEXT
Input data set. . : 'RMM.EXTRACT'
-----
```

Figure 39. Adding a New Report Definition from a Report Type Using the DFSMSrmm Report Types Panel

2. Enter a one to eight character report name on the popup window as shown in Figure 40. Press the ENTER key.

```
EDGPG021

Enter the report name . . . . MYREP1
```

Figure 40. Adding a New Report Definition from a Report Type and Specifying a Report Name

3. Type S in the S column on the Select Reporting Tool panel as shown in Figure 41 to select a reporting tool. Press the END key to save the reporting tool with the report definition.

```

Panel Help
-----
EDGPG040          Select Reporting Tool      Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

S Reporting tool
-----
S ICETOOL
  ICETOOL with totals line
***** Bottom of data *****

```

Figure 41. Adding a New Report Definition from a Report Type Using the Select Reporting Tool Panel

4. Select the fields that you want in your report by typing a number in the CO column. Begin with the number 1 on the DFSMSrmm Report Definition panel as shown in Figure 42 on page 30. The fields are ordered from left to right across the report. The report definition name for the report that you selected appears in the title of the DFSMSrmm Report Definition panel. The panel displays the Report title, the Report footer, and the Reporting tool for this report. To group your data and produce a page break when the data content of the group field changes, enter a G (Group) in the CO column for the field name. Group field names do not appear as columns on the report, but appear as field names in the report header.
5. Enter the sort fields in numerical order, beginning with the number 1 in the SO (Sort Order) column. Then enter the direction of the sorted data. Because the data for a group field must be in sorted sequence, this field must have a sort entry in the SO column. For example, the report definition that is defined on this panel has six columns of data. The left-hand column contains the volume serial number. The right-hand column contains the data set name of the first file on the volume. The data is grouped by the last change date of the volume record with the earliest date appearing at the top of the report and a new page printed when the date changes.
6. Type S in the S column on one or more fields to select a subset of input records for your report and press the ENTER key.

```

Panel Help
-----
EDGPG050          DFSMSrmm Report Definition - MYREP1          Row 1 to 18 of 58
Command ==>>>          Scroll ==>> PAGE

Report title . . . My RMM Datasets
Report footer . . IBM Internal
Reporting tool . : ICETOOL                                Report width: 97

Use END to save changes, NOSAVE to ignore
Select a field name with S to specify a field selection criterion

S CO SO  Field name          Column header text          CW Len Typ
-----
1 2A RDDSNAM          Data set name              44 44 C
2   RDVOLSER          Volser                     6  6 C
3   RDDSNSEQ          DSN#                       4  4 C
4   RDCRDATE          Cr-Date                    10 10 C
5   RDCRTIME          Cr-Time                     10  6 C
6   RDCRSID          Cr-Sysid                    8  8 C
S   1A RDOWNSN          DATA SET OWNER           14  8 C
   RDTYPE             RECORD TYPE - 'C'D'       18  1 C
   RDLCDATE           LAST CHANGE DATE of data set rec  32 10 C
   RDLCTIME           LAST CHANGE TIME (HHMMSS) of    28  6 C
   RDLCSID            LAST CHANGE USER ID of data set  31  8 C
   RDLCSID            LAST CHANGE SYSTEM ID of data se  32  8 C
   RDUNITAD           CREATING DRIVE ADDRESS        22  4 C
   RDRECFM            RECORD FORMAT                 13  4 C
   RDVOLSEQ           VOLUME SEQUENCE NUMBER        22  4 C
   RDLRECL            LOGICAL RECORD LENGTH         21  6 C
   RDBLKSZ            PHYSICAL BLOCK SIZE           19  6 C
   RDBLKCNT           BLOCK COUNT                    11  8 C

```

Figure 42. Adding a New Report Definition from a Report Type Using the DFSMSrmm Report Definition Panel

7. Enter the record selection criteria on the DFSMSrmm Report Criteria panel, as shown in Figure 43 on page 31, to select a subset of the input records for your report. DFSMSrmm only includes the records that meet the criteria that you specify as input to your report. Press the PF1 key with the cursor on any input field and DFSMSrmm displays a help panel that describes the field and the valid values that you should use. Use the S column to order the listed fields from top to bottom or to add or change the record selection criteria. Use the Op (Operator) column to specify the logical operator that you want to use for comparing the field contents with the values in the Compare value(s) column. Use the Compare value(s) column to specify the values that you want to compare. Type the exact value that you want to compare because the comparisons are case sensitive. If you enter more than 40 characters, use the I line command in the S column to add more values on the DFSMSrmm Report Criteria Details panel, as shown in Figure 44 on page 31. Use the Conj (Conjunction) column to specify how the fields are logically connected.


```

Panel  Help
-----
EDGPG060          DFSMSrmm Report Criteria - MYREP1          Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

Report title : My RMM Datasets

Use END to save changes, NOSAVE to ignore
The following line commands are valid: B,D,I,N,P,R, and T
Comparison operators: EQ =, NE <>, GT >, GE >=, LT <, LE <=, IN, BW
Conjunction: AND, OR, AND(, )AND

S Field name          Op Compare value(s)          Conj Len Typ
-----
RDTYPE                EQ D                          AND    1  C
I RDOWNDSN            EQ D094746                    8      C
***** Bottom of data *****

```

Figure 43. Adding a New Report Definition from a Report Type Using the DFSMSrmm Report Criteria Panel

8. Add, change, or delete any of the values on this panel and press the ENTER key to show your changes on the DFSMSrmm Report Criteria panel, as shown in Figure 43.

```

EDGPG061          DFSMSrmm Report Criteria Details - MYREP1

Field name . . . . : RDOWNDSN
Operation . . . . : EQ
Compare value(s) . . D094746
Compare value(s) . .
Conjunction . . . .
Length . . . . . : 8
Type . . . . . : C

```

Figure 44. Adding a New Report Definition from a Report Type Using the DFSMSrmm Report Criteria Details Panel

9. Press the END key on the DFSMSrmm Report Criteria panel, as shown in Figure 43, to save the report criteria and return to the DFSMSrmm Report Types panel that was shown in Figure 39 on page 28.

Related Reading: To generate and save the JCL to run your report, see “Generating and Saving Your JCL” on page 21. To edit the JCL and submit the report for batch processing, see “Running Your Report” on page 22.

Specifying Report Type Criteria

To specify report type basic record selection criteria, follow this procedure.

1. Type S in the S column for a report type on the DFSMSrmm Report Types panel as shown in Figure 45 on page 32. Press the ENTER key.

```

Panel Help
-----
EDGPG200          DFSMSrmm Report Types          Row 10 to 13 of 18
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,C,D,R, and S

S Name      Description
-----
S EDGRVSCR  Inventory of Scratch Volumes
           Macro library . . : 'SYS1.MACLIB'
           Applicable macros : EDGRVEXT
           Input data set. . : 'RMM.EXTRACT'
-----
           EDGSSREC SMF Records for Bins
           Macro library . . : 'SYS1.MODGEN'
           Applicable macros : EDGSMFAR EDGSSREC
           Input data set. . : 'RMM.SMFAUD'
-----
           EDGSDREC SMF Records for Data Sets
           Macro library . . : 'SYS1.MODGEN'
           Applicable macros : EDGSMFAR EDGSDREC
           Input data set. . : 'RMM.SMFAUD'
-----
           EDGSOREC SMF Records for Owners
           Macro library . . : 'SYS1.MODGEN'
           Applicable macros : EDGSMFAR EDGSOREC
           Input data set. . : 'RMM.SMFAUD'
-----

```

Figure 45. Specifying Report Type Criteria Using the DFSMSrmm Report Types Panel

2. Type S in the S column on the DFSMSrmm Report Type panel as shown in Figure 46 to select the fields to use in your selection criteria and press the ENTER key. The name of the report type that you selected appears in the title of this panel.

```

Panel Help
-----
EDGPG210          DFSMSrmm Report Type - EDGRVSCR      Row 1 to 22 of 115
Command ==>>>          Scroll ==>> PAGE

Report type : Inventory of Scratch Volumes
Select a field name with S to specify a field selection criterion

S Field name      Column header text
-----
S RVTYP           RECORD TYPE - C'V'
RVVLSER          VOLUME SERIAL NUMBER
RVPVOL           PREVIOUS VOLUME IN SEQUENCE
RVNVOL           NEXT VOLUME IN SEQUENCE
RVMDMVID         MULTI-DSET MULT-VOL ID
RVCRDATE         CREATE DATE of volume record
RVCRTIME         CREATE TIME HHMMSS of volume rec
RVCRSID          CREATE SYSTEM ID of volume recor
RVLCDATE         LAST CHANGE DATE of volume recor
RVLCTIME         LAST CHANGE TIME HHMMSS of
RVLCSID          LAST CHANGE USER ID of volume
RVLCUID          LAST CHANGE SYSTEM ID of volume

```

Figure 46. Specifying Report Type Criteria Using the DFSMSrmm Report Type Panel

3. Enter the record selection criteria on the DFSMSrmm Report Criteria panel, as shown in Figure 47 on page 33, to select a subset of the input records for your report. DFSMSrmm only includes the records that meet the criteria that you specify as input to your report. Press the PF1 key with the cursor on any input field and a help panel describes the field and the valid values to be used. Use the S column to order the listed fields from top to bottom or to add or change

the record selection criteria. Use the Op (Operator) column to specify the logical operator that you want to use for comparing the field contents with the values in the Compare value(s) column. Use the Compare value(s) column to specify the values that you want compared. Type the exact value that you want to compare because the comparisons are case sensitive. If you enter more than 40 characters, use the I line command in the S column to add more values on the DFSMSrmm Report Criteria Details panel, as shown in Figure 48 on page 34. Use the Conj (Conjunction) column to specify how the fields are logically connected.

```

Panel  Help
-----
EDGPG220          DFSMSrmm Report Type Criteria - EDGRVSCR      Row 1 to 2 of 2
Command ==>>>                               Scroll ==>> PAGE

Report type  : Inventory of Scratch Volumes

The following line commands are valid: B,D,I,N,P,R, and T
Comparison operators: EQ =, NE <>, GT >, GE >=, LT <, LE <=, IN, BW
Conjunction: AND, OR, AND(, )AND

S Field name          Op Compare value(s)                Conj Len Typ
-----
I RVTYP              EQ X
RVOWNID              EQ
                                     AND   1  C
                                     8  C

```

Figure 47. Specifying Report Type Criteria Using the DFSMSrmm Report Type Criteria Panel

4. Add, change, or delete any of the values on this panel and press the ENTER key to show your changes on the DFSMSrmm Report Criteria panel, as shown in Figure 47.

```
EDGPG221  DFSMSrmm Report Type Criteria Details - EDGRVSCR
Field name . . . . : RVTYPE
Operation . . . . : EQ
Compare value(s) . . X
Compare value(s) . .
Conjunction . . . . AND
Length . . . . . : 1
Type . . . . . : C
```

Figure 48. Specifying Report Type Criteria Using the DFSMSrmm Report Criteria Details Panel

5. Press the END key on the DFSMSrmm Report Criteria panel, as shown in Figure 47 on page 33, to save the report criteria and to return to the DFSMSrmm Report Types panel that was shown in Figure 45 on page 32.

Related Reading: To generate and save the JCL to run your report, see “Generating and Saving Your JCL” on page 21. To edit the JCL and submit the report for batch processing, see “Running Your Report” on page 22.

Working with Reporting Tools

A reporting tool is a REXX EXEC that builds control statements to create reports using a reporting utility, such as DFSORT’s ICETOOL. The EXEC processes a report definition and uses an ISPF skeleton to generate the JCL to run the report job. You can add, change, or delete reporting tools in the report generator as described in the following procedures.

Changing the Reporting Tool in a Reporting Definition

When you change the reporting tool defined in a report definition from the product library or installation library, DFSMSrmm stores the modified report definition in the user library. To change the reporting tool defined in a report definition, follow this procedure.

1. Type T in the S column on the DFSMSrmm Report Definitions panel as shown in Figure 49 on page 35. Press the ENTER key.

```

Panel Help
-----
EDGPG020          DFSMSrmm Report Definitions          Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

The following line commands are valid: A,D,G,J,N,S, and T

S Name      Report title          Report type          User id
-----
  EDGGR01   Scratch tapes by volume serial  Extended Extract Records  D094746
  T SCRVOL   Scratch Volume List            Extract Records for Volumes  D094746
***** Bottom of data *****

```

Figure 49. Selecting a Reporting Tool Using the DFSMSrmm Report Definitions Panel

2. Type S in the S column on the Select Reporting Tool panel, as shown in Figure 50, to select a reporting tool. Press the END key to save the reporting tool with the report definition.

```

Panel Help
-----
EDGPG040          Select Reporting Tool          Row 1 to 2 of 2
Command ==>>>          Scroll ==>> PAGE

S Reporting tool
-----
  ICETOOL
S ICETOOL with totals line
***** Bottom of data *****

```

Figure 50. Selecting a Reporting Tool Using the Select Reporting Tool Panel

Adding a New Reporting Tool

To add a new reporting tool, follow this procedure.

1. From the DFSMSrmm Report Generator panel, select Option 3 and press the ENTER key.

```

Panel Help
-----
EDGPG000          DFSMSrmm Report Generator
Option ==> 3

0  OPTIONS          - Specify dialog options and defaults
1  REPORT           - Work with reports
2  REPORT TYPE     - Work with report types
3  REPORTING TOOL  - Work with reporting tools

Enter selected option or END command. For more info., enter HELP or PF1.

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```

Figure 51. Adding a New Reporting Tool from the DFSMSrmm Report Generator Panel

2. Type A in the S column next to any item in the reporting tool list and press the ENTER key.

```

Panel Help
-----
EDGPG040          Select Reporting Tool          Row 1 to 2 of 2
Command ==>                               Scroll ==> PAGE

S Reporting tool
- -----
  ICETOOL
A ICETOOL with totals line
***** Bottom of data *****

```

Figure 52. Requesting the Addition of a Reporting Tool

3. DFSMSrmm displays the Add a Reporting Tool panel shown in Figure 53 on page 37. Update the information and press the ENTER key to make the changes. In the example, MYTOOL is an EXEC that should be stored in an EXEC library.

```

EDGPG310          Add a Reporting Tool

Reporting tool . . My own ICETOOL Report
EXEC . . . . . MYTOOL
Colspace . . . . 3
Group sort . . . . U

```

Figure 53. An Example of Adding a Tool Called MYTOOL

Changing a Reporting Tool

To change a reporting tool in a library, follow this procedure.

1. Type C in the S column next to the reporting tool you want to change and press the ENTER key.

```

Panel Help
-----
EDGPG300          DFSMSrmm Reporting Tools          Row 1 to 3 of 3
Command ==>>>                                     Scroll ==>> PAGE

The following line commands are valid: A,C, and D

S Reporting tool          EXEC      Colspace Group sort
-----
ICETOOL                   EDGRGICE    3          U
ICETOOL with totals line EDGRGSYN    3          U
C My own ICETOOL Report   MYTOOL      3          U
***** Bottom of data *****

```

Figure 54. Changing a Reporting Tool

2. DFSMSrmm displays the Change a Reporting Tool panel shown in Figure 55 in which you can specify a reporting tool name, the spacing between columns in a report, and the way groups are sorted in a report. Use the Colspace column to specify the number of spaces between the report columns. This value is dependent on the reporting tool used in the EXEC and is only considered for the calculation of the report width. The Colspace column values can be a decimal number between 0 and 9. Use the Group Sort column to specify how the reporting tool sorts grouped field names. Group sorting depends on the way the reporting utility you select sorts fields. For example, DFSORT's ICETOOL supports unique sorting while SAS** support is for mixed sorting. Specify U to sort all the grouped field names in either ascending or descending order. Specify M to sort grouped field names in mixed order with some groups in ascending order and some groups in descending order.

```

EDGPG320          Change a Reporting Tool

Reporting tool . . My own Reporting Tool
EXEC . . . . . : MYTOOL
Colspace . . . . 3
Group sort . . . . U

```

Figure 55. Changing Reporting Tool Values

Deleting a Reporting Tool

To delete a reporting tool from the list of reporting tools, follow this procedure.

1. Type D in the S column next to the reporting tool you want to remove from the list of reporting tools and press the ENTER key.

```
Panel Help
-----
EDGPG300          DFSMSrmm Reporting Tools          Row 1 to 3 of 3
Command ==>          Scroll ==> PAGE

The following line commands are valid: A,C, and D

S Reporting tool          EXEC      Colspace Group sort
-----
ICETOOL                  EDGRGICE      3          U
ICETOOL with totals line EDGRGSYN      3          U
D My own Reporting Tool  MYTOOL        3          U
***** Bottom of data *****
```

Figure 56. Deleting a Reporting Tool

2. DFSMSrmm displays the confirmation panel shown in Figure 57. Press the ENTER key to confirm that you want to remove the reporting tool.

```
EDGPG023

Name . . : MYTOOL
Use ENTER to confirm the Delete, else Cancel.
```

Figure 57. Confirming the Deletion of a Reporting Tool

Writing Reporting Tool EXECs

A reporting tool is a REXX EXEC that uses a report definition to create control statements for a report utility such as DFSORT's ICETOOL. The DFSMSrmm report generator uses the EXEC to process a report definition and uses an ISPF skeleton to generate the JCL to run the report. DFSMSrmm supplies the reporting tool EXEC EDGRGICE that works with ISPF skeleton EDGSGICE. You need ISPF and REXX skills to code or update reporting tool EXECs to use a reporting utility other than DFSORT's ICETOOL. You can use EDGRGICE as a model for your processing. You can use ISPF skeletons to create the JCL to run your selected report utility. You will need to tailor the skeletons to perform processing based on the JCL and control statements required for your selected reporting utility. When your reporting tool EXEC is called to generate the reporting JCL, the DFSMSrmm report generator has read the report definition and created REXX variables from the details within the definition. You must process these variables to create the reporting utility JCL and control statements. Refer to "Reporting Tool REXX Variables" for the list of REXX variables that are created by the report generator for use by your reporting tool EXEC.

Reporting Tool REXX Variables

Table 3 describes the REXX variables that you use when writing the reporting tool EXECs.

Table 3. Report Generator Variables

Variable Name	Contents	Format
EDGGCNAM	Criteria field name	66 character
EDGGCOMP	Comparison operator	2 character
EDGGCOMV	Compare value(s)	100 character
EDGGCONJ	Conjunction operator	4 character - 'AND', 'OR', 'AND(', ')AND'
EDGGDNAM	Report definition name	8 character
EDGGFILE	Input file	44 character
EDGGMAC1 - 5	Macro name	8 character
EDGGMACL	Macro library	44 character
EDGGRDES	Report title	30 character
EDGGRFOT	Report footer	30 character
EDGGRDLJ	Report JCL library	44 character
EDGGRDLI	Installation Report def. lib.	44 character
EDGGRDLP	Product Report def. lib.	44 character
EDGGRDLU	User Report def. lib.	44 character
EDGGRNAM	Report name	8 character
EDGGROID	Report originator ID	8 character
EDGGRCID	Report last change ID	8 characters
EDGGRTCS	Reporting tool column space	0 to 9
EDGGRTD	Reporting tool description	30 characters
EDGGRTN	Reporting tool name (EXEC)	8 characters
EDGGRW	Report width	0 to 9999
EDGGSEL	Record selector	1 character

Table 3. Report Generator Variables (continued)

Variable Name	Contents	Format
EDGGSELI	Installation library selector	1 character
EDGGSELP	Product library selector	1 character
EDGGSELU	User library selector	1 character
EDGGTDES	Report type description	30 characters
EDGGTNAM	Report type name	8 characters
EDGGVCO	Column order or group field	1 to 99 or G
EDGGVCW	Column width	1 to 999
EDGGVDES	Column header text taken from the macro variable description	37 characters
EDGGVL	Macro variable length	1 to 999
EDGGVNAM	Field name	66 characters
EDGGVSO	Sort order	1 to 99
EDGGVSD	Sort direction	1 character - A or D
EDGGVTYP	Field type	1 character - Character, Decimal, or Hex

Chapter 3. Creating Inventory Management Reports

DFSMSrmm provides the EDGHSKP utility to help you perform inventory management. You can create standard reports as part of inventory management processing, as described in *z/OS DFSMSrmm Implementation and Customization Guide*. These reports include the vital record specification reports, the extract data set that is used as input to report utilities, and the activity file.

You can specify different date formats and dates in the EDGHSKP execution parameters. The execution parameters are DATE and DATEFORMAT. The DATE parameter only affects the content of the ACTIVITY file and the REPORT file. DFSMSrmm produces the reports using any date you specify as the run date. For example, you can use a date in the future to create a report on the actions DFSMSrmm might take in the future. The DATEFORM parameter determines the date format used in each of the ACTIVITY file, REPORT file, and extract data set file.

Before you can run the EDGHSKP utility, you need to define several data sets. Some data sets used during inventory management must be pre-allocated and cataloged because these data sets are used by both the EDGHSKP utility and the DFSMSrmm subsystem. To retain multiple versions of these data sets, consider using a subsequent job step to copy them to a new generation of a generation data group (GDG).

Table 4 shows the data sets that are used for inventory management reports, along with a description of each.

Table 4. Data Sets Used for Inventory Management Reports

Report	Description
ACTIVITY	Contains detailed information about data set related changes DFSMSrmm makes to the control data set during inventory management. This data set is required when you specify the VERIFY parameter.
MESSAGE	Lists the messages the DFSMSrmm subsystem issues during inventory management. This data set is required.
REPORT	Contains a detailed report of DFSMSrmm vital record specification processing. The data set is optional and is used when you have specified the VRSEL parameter.
REPTEXT	Contains the extract copy of the DFSMSrmm control data set. The extract copy is called the extract data set. The REPTEXT DD or the XREPTEXT DD is required when you specify the EDGHSKP utility RPTEXT parameter.
XREPTEXT	Contains the extract data set that includes the extended extract records consisting of records with combined data set and volume information.

When you protect these data sets, make sure that the RACF user ID that is associated with the DFSMSrmm subsystem has the authority to write to the data sets. RACF is a component of the Security Server for z/OS.

Using the DFSMSrmm Inventory Management Vital Record Specification Report

DFSMSrmm produces a vital records retention report to the REPORT DD during inventory management processing. Use the report to perform these tasks:

- Check the vital record specifications that match to data sets and volumes.
- Identify the versions of the data sets that are being retained.
- Check the required location for each data set and volume.

See *z/OS DFSMSrmm Implementation and Customization Guide* for details about setting up DFSMSrmm to produce the report.

Using the Extract Data Set

You can request that an extract data set that contains information from the control data set is created during DFSMSrmm inventory management. Use the extract data set as input to the DFSMSrmm reporting utility EDGRPTD and to the EDGRRPTE EXEC to create reports. See Chapter 4, “Creating Reports with DFSMSrmm Utilities”, on page 61 for information about using the EDGRPTD utility and the EDGRRPTE EXEC. Requests for extract data sets can be submitted at any time. To obtain extract data sets at the same time that DFSMSrmm is processing other extract data sets, run the EDGHSKP with the RPTEXT parameter. Define your own extract data set and message file to avoid contention with other users.

DFSMSrmm reads sequentially through its control data set and creates a record in the extract data set for each shelf location, volume, data set, software product, owner, and vital record specification record when you specify the REPTEXT DD statement. When you specify the XREPTEXT DD statement, DFSMSrmm creates an addition record called an extended record that contains merged volume and data set information. DFSMSrmm converts information to printable format and can convert date fields into a format you specify. The extract data set is a point-in-time extract of the control data set contents. Use the RMM TSO SEARCH and LIST subcommands to obtain the most current information.

The extract data set can be sorted and used to create reports or lists of executable commands. See “Using EDGRPTD to Create Reports” on page 61 and Chapter 6, “Using DFSMSrmm with DFSORT”, on page 113 for information about creating reports. You can place the extract data set on any volume.

You can specify different date formats for the extract data set by using the DATEFORMAT execution parameter of the DFSMSrmm EDGHSKP utility. DFSMSrmm writes a header record to the extract data set that contains the date format that was used. You can base your processing of the extract data set on this value rather than by analyzing the date fields themselves. Refer to “Extract Data Set Header Record: EDGRHEXT” on page 209 for the layout of the header record.

Table 5 on page 43 shows the date formats that can be used for the records that are written to the extract data set, records that are written to the ACTIVITY file, and any messages that are issued during inventory management. The default date format for all date fields is the value that is specified in the parmlib member EDGRMMxx. The value is initially set to J for Julian. To change the date format for each run of EDGHSKP, use the DATEFORM parameter, which is described in *z/OS DFSMSrmm Implementation and Customization Guide*.

Table 5. Date Formats

Value	Language	Format	Example
A	American	mm/dd/yyyy	12/15/2000
E	European	dd/mm/yyyy	15/12/2000
I	International Organization for Standardization (ISO)	yyyy/mm/dd	2000/12/15
J	Julian	yyyy/ddd	2000/350
D	Default	The date format specified in the DFSMSrmm EDGRMMxx parmlib member.	Initially set to Julian

DFSMSrmm provides the format of the records in the extract data set in mapping macros. See “General-use Programming Interface Mapping Macros” on page 205 for layouts of the macros. You can use DFSORT to sort the extract data set records to create many types of reports. See Appendix A, “DFSORT Symbols for Use with DFSMSrmm”, on page 163.

For example, you could select the extract records that show volumes with temporary read errors. Sort the resulting list by descending number of errors. Use this list to determine which volumes you want to replace. You can then use the information as input to the RMM CHANGEVOLUME subcommand with the RELEASEACTION(REPLACE) operand to update DFSMSrmm with the required action.

Using the Inventory Management ACTIVITY File

The ACTIVITY file is a pre-allocated direct access storage device (DASD) data set, like the REPORT file. The ACTIVITY file is not intended to be a report. The ACTIVITY file contains detailed information about changes made to data sets during vital record processing. The DFSMSrmm-supplied sample EDGJHKPA shows the JCL to allocate the ACTIVITY file, as well as other DFSMSrmm inventory management data sets. The DFSMSrmm-supplied sample EDGJACTP shows the JCL to report on the contents of the ACTIVITY file.

The ACTIVITY file is a variable-blocked file with the record length set to the largest record created by DFSMSrmm. The system determines the block size of the ACTIVITY file. See “ACTIVITY File Record Macro: EDGACTRC” on page 237 for a mapping of the ACTIVITY file.

DFSMSrmm writes an activity record for data set changes only when a change is identified in the ACTD_CHANGE section of the record. During vital record processing, if an ACTIVITY file is allocated, DFSMSrmm writes information about changes made to the matching vital record specification, the vital record status, and the retention date to the ACTIVITY file.

You can view the ACTIVITY file online. To print the ACTIVITY file, use a product such as DFSORT or DFSORT’s ICETOOL to selectively format and print fields.

DFSMSrmm provides a sample job EDGJACTP in SAMPLIB that shows how to selectively format and print fields. The sample EDGJACTP produces reports in pairs: a report containing detailed information and a summary report that is broken down by category and a count within each category. The reports focus on the

different types of changes that DFSMSrmm makes to data set records during inventory management. For example, DFSMSrmm can change the vital record specification or vital record specification subchain that retains the data sets. You can use these reports to help you understand the updates that DFSMSrmm is making to data sets that are based on matching vital record specifications.

VRS Report

The VRS report, as shown in Figure 58 on page 45, provides information about the retention status of a data set. The report includes a data set when the status of the data set changes between being retained by a vital record specification and not retained by a vital record specification. Use the VRS report to determine changes in the retention status of a data set.

The data columns in the VRS report provide the following information:

DSNAME

The name of the data set that has had a change in status as a result of running vital record processing.

JOBNAME

The jobname associated with the data set.

VOLSER

The volume serial number of the volume on which the data set resides.

O-ST

The old vital record status. Y is the VRS-retained status. N is the Not VRS-retained status.

N-ST

The new vital record status. Y is the VRS-retained status. N is the Not VRS-retained status.

RSN

The reason the data set is no longer retained by a vital record specification. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 which provides the drop reasons.

PRIMARY VRS

The name from the first vital record specification in the matching vital record specification chain.

JOB MASK

The jobname from the first vital record specification in the matching vital record specification chain.

TYPE

The type of the vital record specification matched to the data set. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 for the vital record specification types.

```

1Data Sets Changed VRS Status      05/31/00      02:02:20      - 1 -
Status Change and Drop Reason:  RETAINED
DSNAME                               JOBNAME  VOLSER  O-ST  N-ST  RSN  PRIMARY VRS                               JOB MASK  TYPE
-----
RMMUSER.D001                         A00001  N      Y      Y      RMMUSER.D001
RMMUSER.D002                         A00004  N      Y      Y      RMMUSER.D002
RMMUSER.D002                         A00005  N      Y      Y      RMMUSER.D002
RMMUSER.D003                         A00007  N      Y      Y      RMMUSER.D003
RMMUSER.D003                         A00008  N      Y      Y      RMMUSER.D003

2Data Sets Changed VRS Status      05/31/00      02:02:20      - 3 -
Status Change and Drop Reason:  DROPPED  DAYS
DSNAME                               JOBNAME  VOLSER  O-ST  N-ST  RSN  PRIMARY VRS                               JOB MASK  TYPE
-----
DSMASTER.DS2                         JNAME001 A00021  Y      N      D      DSM*.DS2
DSMASTER.DS2                         JNAME001 A00022  Y      N      D      DSM*.DS2
DSMASTER.DS3                         JNAME002 A00022  Y      N      D      DSM*.DS3
DSMASTER.DS3                         JNAME002 A00023  Y      N      D      DSM*.DS3
DSMASTER.DS4                         A00024  Y      N      D      DSM*.DS4
DSMASTER.DS4                         A00024  Y      N      D      DSM*.DS4

```

Figure 58. Sample VRS Report

VRSS Report

The VRSS report, as shown in Figure 59, summarizes details from the VRS report. The VRSS report provides a summary of all the data sets that have changed during the current run of inventory management. You can use the report to determine if any unusual activity has taken place during vital records processing. For example, the report might show a significant number of data sets that were dropped from retention by vital record specifications. You might want to check that the vital record specifications you have defined are defined correctly.

The VRSS report lists the number of data sets that are in each vital record specification status category.

The data columns in the VRSS report provide the following information:

Status Change

The new vital record status. The status is DROPPED or RETAINED.

Drop Reason

The reason that a vital record specification no longer retains a data set. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 for the drop reasons.

COUNT

The number of data sets with the same status and drop reason.

```

1Data Set VRS status change summary      05/31/00      02:02:20      - 1 -
Status Change  Drop Reason  COUNT
-----
DROPPED       DAYS        6
RETAINED      DAYS        5

```

Figure 59. Sample VRSS Report

RETDATE Report

The RETDATE report, as shown in Figure 60 on page 47, provides information about the changes to the retention date of a data set that occur when you run vital record processing. DFSMSrmm has changed information about the data set or is using a new vital record specification in a vital record specification chain.

You can use the VRS report described in “VRS Report” on page 44 to determine the old and new retention dates for an updated data set. You can use the RETDATE report to see how DFSMSrmm has applied vital record specifications you have defined.

The data columns in the RETDATE report provide the following information:

DSNAME

The name of the data set information updated by vital record processing.

JOBNAME

The jobname associated with the data set.

VOLSER

The volume serial number of the volume on which the data set resides.

PREVIOUS

The old retention date for the data set.

NEW DATE

The new retention date for the data set.

PRIMARY VRS

The name from the first vital record specification in the matching vital record specification chain.

JOB MASK

The jobname from the first vital record specification in the matching vital record specification chain.

TYPE

The type of the vital record specification matched to the data set. See “ACTIVITY File Record Macro: EDGACTRC” on page 237 for the vital record specification types.

SUBCHAIN

This is the name of the vital record specification in the primary vital record specification chain that DFSMSrmm is currently using to retain the data set.

1Data Sets Changed Retention Date				05/31/00	02:02:22	- 1 -			
New Retention Date: CYCL/00001									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D003		A00007		CYCL/00001	RMMUSER.D003		D	N1D003	
RMMUSER.D005		A00012		CYCL/00001	RMMUSER.D005		D		
RMMUSER.D005		A00013		CYCL/00001	RMMUSER.D005		D		
RMMUSER.D006		A00015		CYCL/00001	D006		S		
RMMUSER.D007		A00017		CYCL/00001	D007		V		
RMMUSER.D008		A00020		CYCL/00001	RMMUSER.D008		M		
RMMUSER.D009		A00025		CYCL/00001	RMMUSER.D009		M		
RMMUSER.D011		A00030		CYCL/00001	A00030		V	N1A00030	
RMMUSER.D011		A00031		CYCL/00001	A00031		V	N1A00031	
1Data Sets Changed Retention Date				05/31/00	02:02:22	- 2 -			
New Retention Date: CYCL/00002									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D008		A00019		CYCL/00002	RMMUSER.D008		M		
RMMUSER.D009		A00023		CYCL/00002	RMMUSER.D009		M		
RMMUSER.D012		A00034		CYCL/00002	A00034		V	N1D012	
RMMUSER.D012		A00035		CYCL/00002	A00035		V	N1D012	
RMMUSER.D008		A00019		CYCL/00002	RMMUSER.D008		M		
RMMUSER.D009		A00023		CYCL/00002	RMMUSER.D009		M		
RMMUSER.D012		A00034		CYCL/00002	A00034		V	N1D012	
RMMUSER.D012		A00035		CYCL/00002	A00035		V	N1D012	
RMMUSER.D008		A00019		CYCL/00002	RMMUSER.D008		M		
RMMUSER.D009		A00023		CYCL/00002	RMMUSER.D009		M		
RMMUSER.D012		A00034		CYCL/00002	A00034		V	N1D012	
RMMUSER.D012		A00035		CYCL/00002	A00035		V	N1D012	
1Data Sets Changed Retention Date				05/31/00	02:02:22	- 3 -			
New Retention Date: 1999/099									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D003		A00008		1999/099	RMMUSER.D003		D		
RMMUSER.D004		A00009		1999/099	RMMUSER.D004		D	D004	
RMMUSER.D009		A00022		1999/099	RMMUSER.D009		M		
RMMUSER.D009		A00024		1999/099	RMMUSER.D009		M		
RMMUSER.D010		A00027		1999/099	RMMUSER.D010		M		
RMMUSER.D010		A00028		1999/099	RMMUSER.D010		M		
RMMUSER.D003		A00008		1999/099	RMMUSER.D003		D		
RMMUSER.D004		A00009		1999/099	RMMUSER.D004		D	D004	
RMMUSER.D009		A00022		1999/099	RMMUSER.D009		M		
RMMUSER.D009		A00024		1999/099	RMMUSER.D009		M		
RMMUSER.D010		A00027		1999/099	RMMUSER.D010		M		
RMMUSER.D010		A00028		1999/099	RMMUSER.D010		M		
1Data Sets Changed Retention Date				05/31/00	02:02:22	- 4 -			
New Retention Date: 1999/100									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D001		A00001		1999/100	RMMUSER.D001		D		
RMMUSER.D002		A00004		1999/100	RMMUSER.D002		D		
RMMUSER.D002		A00005		1999/100	RMMUSER.D002		D		
RMMUSER.D010		A00029		1999/100	RMMUSER.D010		M		
RMMUSER.D001		A00001		1999/100	RMMUSER.D001		D		
RMMUSER.D002		A00004		1999/100	RMMUSER.D002		D		
RMMUSER.D002		A00005		1999/100	RMMUSER.D002		D		
RMMUSER.D010		A00029		1999/100	RMMUSER.D010		M		
1Data Sets Changed Retention Date				05/31/00	02:02:22	- 5 -			
New Retention Date: 1999/335									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D003		A00008		1999/335	RMMUSER.D003		D		
RMMUSER.D004		A00009		1999/335	RMMUSER.D004		D	D004	
RMMUSER.D009		A00022		1999/335	RMMUSER.D009		M		
RMMUSER.D009		A00024		1999/335	RMMUSER.D009		M		
RMMUSER.D010		A00027		1999/335	RMMUSER.D010		M		
RMMUSER.D010		A00028		1999/335	RMMUSER.D010		M		
1Data Sets Changed Retention Date				05/31/00	02:02:22	- 6 -			
New Retention Date: 1999/336									
DSNAME	JOBNAME	VOLSER	PREVIOUS	NEW DATE	PRIMARY VRS	JOB MASK	TYPE	SUBCHAIN	
RMMUSER.D001		A00001		1999/336	RMMUSER.D001		D		
RMMUSER.D002		A00004		1999/336	RMMUSER.D002		D		
RMMUSER.D002		A00005		1999/336	RMMUSER.D002		D		
RMMUSER.D010		A00029		1999/336	RMMUSER.D010		M		

Figure 60. Sample RETDATE Report

RETDS Report

The RETDS report, as shown in Figure 61 on page 48, summarizes details from the RETDATE report. The RETDS report provides a summary of the data set retention dates that have changed during vital record processing. The RETDS lists the

retention dates that have been used to update data set information and the number of data sets that have the same retention date value. The report consists of one line for each retention date.

The data columns in the RETDS report provide the following information:

New Retention Date

A new retention date that was updated for data sets.

COUNT

The number of data sets with the same retention date value.

```

1Summary of new Data Set retention dates      05/31/00      02:02:23      - 1 -

New Retention Date          COUNT
-----
CYCL/00001                  33
CYCL/00002                  12
1999/099                    12
1999/100                     8
1999/335                     6
1999/336                     4

```

Figure 61. Sample RETDS Report

MATCHVRS Report

The MATCHVRS report, as shown in Figure 62 on page 50, provides information about the vital record specifications that match to data sets updated when you run vital record processing. The data sets are added to the report because DFSMSrmm has matched the data set to a different primary or secondary vital record specification. The report provides change information and does not necessarily provide information on the retention of the data set.

The data columns in the MATCHVRS report provide the following information:

DSNAME

The name of the data set affected by vital record processing.

JOBNAME

The jobname associated with the data set.

VOLSER

The volume serial number of the volume on which the data set resides.

O-ST

The old vital record status. Y is the VRS-retained status. N is the Not VRS-retained status.

N-ST

The new vital record status. Y is the VRS-retained status. N is the Not VRS-retained status.

DROPRSN

The reason the vital record specification no longer retains the data set. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 for the reason codes.

OLD PRIMARY VRS

The vital record specification that was previously used to retain the data set.

JOB MASK

The jobname from the first vital record specification in the matching vital record specification chain.

TYPE

The vital record specification types. See “ACTIVITY File Record Macro: EDGACTRC” on page 237 for the vital record specification types.

2nd. VRS

This is the name of the first VRS in the secondary VRS chain that DFSMSrmm applies to a data set.

2nd. JOB

This is the jobname of the first VRS in the secondary VRS chain that DFSMSrmm applies to a data set.

DSNAME	JOBNAME	VOLSER	O-ST	N-ST	DROPRSN	OLD PRIMARY VRS	JOB MASK	TYPE	2nd. VRS	2nd. JOB
Data Sets Matching to different VRS 05/31/00 02:02:25 - 1 -										
NEW PRIMARY VRS: DRMMUSER.D001										
RMMUSER.D001		A00001	N	Y						
RMMUSER.D001		A00002	N	N	D					
RMMUSER.D001		A00001	N	Y						
RMMUSER.D001		A00002	N	N	D					
RMMUSER.D001		A00001	N	Y						
RMMUSER.D001		A00002	N	N	D					
Data Sets Matching to different VRS 05/31/00 02:02:25 - 2 -										
NEW PRIMARY VRS: DRMMUSER.D002										
RMMUSER.D002		A00003	N	N	C					
RMMUSER.D002		A00004	N	Y						
RMMUSER.D002		A00005	N	Y						
RMMUSER.D002		A00003	N	N	C					
RMMUSER.D002		A00004	N	Y						
RMMUSER.D002		A00005	N	Y						
RMMUSER.D002		A00003	N	N	C					
RMMUSER.D002		A00004	N	Y						
RMMUSER.D002		A00005	N	Y						
Data Sets Matching to different VRS 05/31/00 02:02:25 - 3 -										
NEW PRIMARY VRS: DRMMUSER.D003										
RMMUSER.D003		A00006	N	N	C					
RMMUSER.D003		A00007	N	Y						
RMMUSER.D003		A00008	N	Y						
RMMUSER.D003		A00006	N	N	C					
RMMUSER.D003		A00007	N	Y						
RMMUSER.D003		A00008	N	Y						
RMMUSER.D003		A00006	N	N	C					
RMMUSER.D003		A00007	N	Y						
RMMUSER.D003		A00008	N	Y						
Data Sets Matching to different VRS 05/31/00 02:02:25 - 4 -										
NEW PRIMARY VRS: DRMMUSER.D004										
RMMUSER.D004		A00009	N	Y						
RMMUSER.D004		A00009	N	Y						
RMMUSER.D004		A00009	N	Y						
Data Sets Matching to different VRS 05/31/00 02:02:25 - 5 -										
NEW PRIMARY VRS: DRMMUSER.D005										
RMMUSER.D005		A00010	N	N	B					
RMMUSER.D005		A00011	N	N	B					
RMMUSER.D005		A00012	N	Y						
RMMUSER.D005		A00013	N	Y						
RMMUSER.D005		A00010	N	N	B					
RMMUSER.D005		A00011	N	N	B					
RMMUSER.D005		A00012	N	Y						
RMMUSER.D005		A00013	N	Y						
RMMUSER.D005		A00010	N	N	B					
RMMUSER.D005		A00011	N	N	B					
RMMUSER.D005		A00012	N	Y						
RMMUSER.D005		A00013	N	Y						

Figure 62. Sample MATCHVRS Report

MATCHVRS Report

The MATCHVRS report, as shown in Figure 63 on page 51, summarizes details from the MATCHVRS report. The report provides the vital record specification name and the number that are newly matched by the vital record specification. Use this report to help you determine if any new vital record specifications now match to your data sets.

The data columns in the MATCHVRS report provide the following information:

New Primary VRS

The name from the first vital record specification in the matching vital record specification chain.

Jobname mask

The jobname from the first vital record specification in the matching vital record specification chain.

Match Type

The type of the vital record specification matched to the data set. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 for the vital record specification types.

COUNT

The number of data sets with the same matching primary VRS.

```

1Summary of new matching VRSs      05/31/00      02:02:28      - 1 -

```

New Primary VRS	Jobname mask	Match Type	COUNT
A00030		V	3
A00031		V	3
A00032		V	3
A00033		V	3
A00034		V	3
A00035		V	3
A00036		V	3
D006		S	6
D007		V	6
RMMUSER.D001		D	6
RMMUSER.D002		D	9
RMMUSER.D003		D	9
RMMUSER.D004		D	3
RMMUSER.D005		D	12
RMMUSER.D008		M	9
RMMUSER.D009		M	15
RMMUSER.D010		M	12

Figure 63. Sample MATCHVRS Report

SUBCHN Report

During vital record processing, DFSMSrmm processes chains of vital record specifications if you have defined them. The SUBCHN report, as shown in Figure 64 on page 52, shows the vital record specification within a vital record specification chain that now matches to a data set. Data sets are listed if they reach a new subchain during the current run of vital record processing.

The data columns in the SUBCHN report provide the following information:

DSNAME

The name of the data set that has had a change in status as a result of running vital record processing.

JOBNAME

The jobname associated with the data set.

VOLSER

The volume serial number of the volume on which the data set resides.

PRIMARY VRS

The name from the first vital record specification in the matching vital record specification chain.

JOB MASK

The jobname from the first vital record specification in the matching vital record specification chain.

TYPE

The type of the vital record specification matched to the data set. See "ACTIVITY File Record Macro: EDGACTRC" on page 237 for the vital record specification types.

2nd.VRS

The name of the first VRS in the secondary VRS chain that DFSMSrmm matches to a data set.

JOB

The job name of the first VRS in the secondary VRS chain that DFSMSrmm matches to a data set.

SUBCHAIN DATE

The name of the primary vital record specification subchain retaining the data set and the date it started to retain the data set.

2nd.SUBC DATE

The name of the secondary vital record specification subchain retaining the data set and the date it started to retain the data set.

```
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 1 -
NEW SUBCHAIN AND DATE:  D004  1999/098

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D004    A00009  RMMUSER.D004    D
RMMUSER.D004    A00009  RMMUSER.D004    D
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 2 -
NEW SUBCHAIN AND DATE:  D004  1999/334

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D004    A00009  RMMUSER.D004    D
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 3 -
NEW SUBCHAIN AND DATE:  N1A000301999/098

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D011    A00030  A00030          V
RMMUSER.D011    A00030  A00030          V
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 4 -
NEW SUBCHAIN AND DATE:  N1A000301999/334

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D011    A00030  A00030          V
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 5 -
NEW SUBCHAIN AND DATE:  N1A000311999/098

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D011    A00031  A00031          V
RMMUSER.D011    A00031  A00031          V
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 6 -
NEW SUBCHAIN AND DATE:  N1A000311999/334

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D011    A00031  A00031          V
Data Sets Changed VRS Subchain      05/31/00      02:02:30      - 7 -
NEW SUBCHAIN AND DATE:  N1D003  1999/098

DSNAME          JOBNAME      VOLSER  PRIMARY VRS      JOB MASK  TYPE  2nd.VRS JOB      SUBCHAIN DATE      2nd.SUBC DATE
-----
RMMUSER.D003    A00007  RMMUSER.D003    D
RMMUSER.D003    A00007  RMMUSER.D003    D
```

Figure 64. Sample SUBCHN Report

SUBCHNS Report

The SUBCHNS report, as shown in Figure 65, summarizes details from the SUBCHN report. You can use the SUBCHNS report to see the vital record specification chains that DFSMSrmm is using to retain data sets.

The data columns in the SUBCHNS report provide the following information:

New Subchain

The primary vital record specification, the secondary vital record specification subchain names, and the dates the vital record specifications started to retain the data set.

COUNT

The number of data sets with the same new subchain.

```
1Summary of new Data Set subchains      05/31/00      02:02:31      - 1 -

New Subchain                          COUNT
-----
D004   1999/098                        2
D004   1999/334                        1
N1A000301999/098                      2
N1A000301999/334                      1
N1A000311999/098                      2
N1A000311999/334                      1
N1D003 1999/098                        2
N1D003 1999/334                        1
N1D012 1999/098                        4
N1D012 1999/334                        2
```

Figure 65. Sample SUBCHNS Report

JCL for EDGJACTP

To create a report, use the JCL, as shown in Figure 66 on page 54.

```

/**EDGJACTP JOB <JOB STATEMENT PARAMETERS>
/**
/*******
/** z/OS DFSMSrmm V1R1 *
/**
/** PROPRIETARY V3 STATEMENT *
/** LICENSED MATERIALS - PROPERTY OF IBM *
/** "RESTRICTED MATERIALS OF IBM" *
/** 5694-A01 *
/** (C) COPYRIGHT 1993,2001 IBM CORP. *
/** STATUS = HDZ11F0 *
/** END PROPRIETARY V3 STATEMENT *
/*******
/**
/** RMM report on ACTIVITY file contents
/** -----
/**
/** INPUT: ACTIVITY DD Statement - current RMM activity file
/** OUTPUT:
/** RUNINFO DD Statement - Controlling options and parameters
/** VRS DD Statement - data sets with changed V/R status
/** VRSS DD Statement - summary by status
/** RETD DD Statement - data sets with new retention date
/** RETDS DD Statement - summary by new date
/** MATCHVRS DD Statement - data sets with new matching VRS
/** MATCHVS DD Statement - summary by new matching VRS
/** SUBCHN DD Statement - data sets retained by new part of chain
/** SUBCHNS DD Statement - summary by new retaining subchain
/**
/** DEPENDANCY: DFSORT R14, for SYMNames support
/**
/** Change History:
/** $S5=OW24798,130,961002,MWW: Created for Audit Phase 1 SPE
/** $K1=K140934,140,970408,BDG: Corrected BREAK for drop reason @K1A
/** $S7=OW30969,140,971217,AE : VRS Enhancements @S7A
/** $LF=RMM210 ,210,990805,GW : RETAINBY and MOVEBY @LFA
/** $LG=RMM210 ,210,990924,AH : DFSORT Symbols @LGA
/** $K2=K160798,210,991125,CHK: Correct the SYMNames library name @K2A
/** $01=OW45053,210,000616,MWW: Clean up symbols/ comment SYMNOUT @01A
/**
/*******

```

Figure 66. JCL for EDGJACTP (Part 1 of 7)


```

//CLEAN EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE 'RMM.REPORT.RUNINFO'
DELETE 'RMM.REPORT.VRS'
DELETE 'RMM.REPORT.VRSS'
DELETE 'RMM.REPORT.RETDATE'
DELETE 'RMM.REPORT.RETDS'
DELETE 'RMM.REPORT.MATCHVRS'
DELETE 'RMM.REPORT.MATCHVS'
DELETE 'RMM.REPORT.SUBCHN'
DELETE 'RMM.REPORT.SUBCHNS'
//*****
//STEP1 EXEC PGM=ICETOOL,REGION=5M
//TOOLMSG DD SYSOUT=* ICETOOL MESSAGES
//DFSMSG DD SYSOUT=* DFSORT MESSAGES
//*SYMNOUT DD SYSOUT=* @01C
//SYMNAMES DD DSN=SYS1.MACLIB(EDGACTSY),DISP=SHR @K2C
//TOOLIN DD * CONTROL STATEMENTS
COPY FROM(ACTIVITY) USING(VRST)
SORT FROM(VRST) TO(SRTDVRST) USING(SRTV)
SORT FROM(RETD) TO(SRTDRETD) USING(SRTD)
SORT FROM(MTCH) TO(SRTDMTCH) USING(SRTM)
SORT FROM(SUBC) TO(SRTDSUBC) USING(SRTC)
*
*
*
DISPLAY FROM(SRTDVRST) LIST(VRS) -
TITLE('Data Sets Changed VRS Status') DATE TIME PAGE -
BLANK -
BTITLE('Status Change and Drop Reason:') -
BREAK(ACTRC_OUTFIL_VITALANDDROP) -
HEADER('DSNAME') ON(ACTRC_DSN_DSNAME) -
HEADER('JOBNAME') ON(ACTRC_DSN_JOBNAME) -
HEADER('VOLSER') ON(ACTRC_DSN_VOL) -
HEADER('O-ST') ON(ACTRC_DSN_OLD_VITAL) -
HEADER('N-ST') ON(ACTRC_DSN_NEW_VITAL) -
HEADER('RSN') ON(ACTRC_DSN_DROP) -
HEADER('PRIMARY VRS') ON(ACTRC_DSN_NEW_MMASK) -
HEADER('JOB MASK') ON(ACTRC_DSN_NEW_MJOB) -
HEADER('TYPE') ON(ACTRC_DSN_NEW_MTYPE)
*
OCCUR FROM(SRTDVRST) LIST(VRSS) -
TITLE('Data Set VRS status change summary') -
DATE TIME PAGE -
BLANK -
HEADER('Status Change') ON(ACTRC_OUTFIL_VITAL) -
HEADER('Drop Reason') ON(ACTRC_OUTFIL_DROP) -
HEADER('COUNT') ON(VALCNT)
*

```

Figure 66. JCL for EDGJACTP (Part 2 of 7)

```

*
DISPLAY FROM(SRTDRETD) LIST(RETDATE) -
  TITLE('Data Sets Changed Retention Date') DATE TIME PAGE -
  BLANK -
  BTITLE('New Retention Date:') BREAK(ACTRC_DSN_NEW_RETDATE) -
  HEADER('DSNAME')      ON(ACTRC_DSN_DSNAME) -
  HEADER('JOBNAME')     ON(ACTRC_DSN_JOBNAME) -
  HEADER('VOLSER')      ON(ACTRC_DSN_VOL) -
  HEADER('PREVIOUS')    ON(ACTRC_DSN_OLD_RETDATE) -
  HEADER('NEW DATE')    ON(ACTRC_DSN_NEW_RETDATE) -
  HEADER('PRIMARY VRS') ON(ACTRC_DSN_NEW_MMASK) -
  HEADER('JOB MASK')    ON(ACTRC_DSN_NEW_MJOB) -
  HEADER('TYPE')        ON(ACTRC_DSN_NEW_MTYPE) -
  HEADER('SUBCHAIN')    ON(ACTRC_DSN_NEW_MNAME)
*
OCCUR FROM(SRTDRETD) LIST(RETDS) -
  TITLE('Summary of new Data Set retention dates') -
  DATE TIME PAGE -
  BLANK -
  HEADER('New Retention Date') ON(ACTRC_DSN_NEW_RETDATE) -
  HEADER('COUNT') ON(VALCNT)
*
*
DISPLAY FROM(SRTDMTCH) LIST(MATCHVRS) -
  TITLE('Data Sets Matching to different VRS') DATE TIME PAGE -
  BLANK -
  BTITLE('NEW PRIMARY VRS:') BREAK(ACTRC_DSN_NEW_VRSS) -
  HEADER('DSNAME')      ON(ACTRC_DSN_DSNAME) -
  HEADER('JOBNAME')     ON(ACTRC_DSN_JOBNAME) -
  HEADER('VOLSER')      ON(ACTRC_DSN_VOL) -
  HEADER('O-ST')        ON(ACTRC_DSN_OLD_VITAL) -
  HEADER('N-ST')        ON(ACTRC_DSN_NEW_VITAL) -
  HEADER('DROPRSN')     ON(ACTRC_DSN_DROP) -
  HEADER('OLD PRIMARY VRS') ON(ACTRC_DSN_OLD_MMASK) -
  HEADER('JOB MASK')    ON(ACTRC_DSN_OLD_MJOB) -
  HEADER('TYPE')        ON(ACTRC_DSN_OLD_MTYPE) -
  HEADER('2nd. VRS')    ON(ACTRC_DSN_OLD_M2MASK) -
  HEADER('2nd. JOB')    ON(ACTRC_DSN_OLD_M2JOB)
*
OCCUR FROM(SRTDMTCH) LIST(MATCHVRS) -
  TITLE('Summary of new matching VRSs') -
  DATE TIME PAGE -
  BLANK -
  HEADER('New Primary VRS') ON(ACTRC_DSN_NEW_MMASK) -
  HEADER('Jobname mask')   ON(ACTRC_DSN_NEW_MJOB) -
  HEADER('Match Type')     ON(ACTRC_DSN_NEW_MTYPE) -
  HEADER('COUNT') ON(VALCNT)
*
*
DISPLAY FROM(SRTDSUBC) LIST(SUBCHN) -
  TITLE('Data Sets Changed VRS Subchain') DATE TIME PAGE -
  BLANK -
  BTITLE('NEW SUBCHAIN AND DATE:') BREAK(ACTRC_DSN_NEW_CHAINS) -
  HEADER('DSNAME')      ON(ACTRC_DSN_DSNAME) -
  HEADER('JOBNAME')     ON(ACTRC_DSN_JOBNAME) -
  HEADER('VOLSER')      ON(ACTRC_DSN_VOL) -
  HEADER('PRIMARY VRS') ON(ACTRC_DSN_NEW_MMASK) -
  HEADER('JOB MASK')    ON(ACTRC_DSN_NEW_MJOB) -
  HEADER('TYPE')        ON(ACTRC_DSN_NEW_MTYPE) -
  HEADER('2nd.VRS JOB') ON(ACTRC_DSN_NEW_M2MATCH) -
  HEADER('SUBCHAIN DATE 2nd.SUBC DATE') ON(ACTRC_DSN_OLD_CHAINS)

```

Figure 66. JCL for EDGJACTP (Part 3 of 7)

```

*
OCCUR FROM(SRTDSUBC) LIST(SUBCHNS) -
  TITLE('Summary of new Data Set subchains') -
  DATE TIME PAGE -
  BLANK -
  HEADER('New Subchain') ON(ACTRC_DSN_NEW_CHAINS) -
  HEADER('COUNT') ON(VALCNT)
*
//ACTIVITY DD DSN=RMM.ACTIVITY.FILE,DISP=SHR
//VRST DD DSN=&&TEMPV1;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//RETD DD DSN=&&TEMPD1;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//MTCH DD DSN=&&TEMPM1;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//SUBC DD DSN=&&TEMPC1;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//SRTDVRST DD DSN=&&TEMPV2;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//SRTDRETD DD DSN=&&TEMPD2;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//SRTDMTCH DD DSN=&&TEMPM2;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//SRTDSUBC DD DSN=&&TEMPC2;,SPACE=(CYL,(10,10),RLSE),UNIT=SYSALLDA
//VRSTCNTL DD *
OUTFIL FNames=RUNINFO,
  INCLUDE=(ACTRC_PRE_TYPE,EQ,ACTRC_PRE_TYPE_HDR),
  HEADER2=(1:'Run Control Information',2X,DATE,2X,TIME,2X,PAGE,/,
    1:'Run Date',
    12:'Date Used',
    23:'Run Time',
    32:'Options',
    72:'DATEFORM',
    81:'VRSJOBNAME',
    92:'VRSCHANGE',
    102:'CATRETPD',
    111:'VRSMIN Count',
    124:'VRSMIN Action',
    138:'VRSEL',
    144:'UNCATALOG',
    154:'TPRACF',
    161:'SYSID',
    170:'CATSYSID',
    179:'RETAINBY',
    188:'MOVEBY',/,
    1:10'-',
    12:10'-',
    23:8'-',
    32:33'-',
    72:8'-',
    81:10'-',
    92:9'-',
    102:8'-',
    111:12'-',
    124:13'-',
    138:5'-',
    144:9'-',
    154:6'-',
    161:8'-',
    170:8'-',
    179:8'-',
    188:8'-'),

```

Figure 66. JCL for EDGJACTP (Part 4 of 7)

```

OUTREC=(ACTRC_RDW,
        5:ACTRC_HDR_RUN_DATE,
        16:ACTRC_HDR_VERIFY_DATE,
        27:ACTRC_HDR_RUN_TIME,
        36:ACTRC_HDR_BACKUP,CHANGE=(6,ACTRC_YES,C'BACKUP',
                                   ACTRC_NO,C' '),X,
        ACTRC_HDR_DSTORE,CHANGE=(6,ACTRC_YES,C'DSTORE',
                                   ACTRC_NO,C' '),X,
        ACTRC_HDR_EXPROC,CHANGE=(6,ACTRC_YES,C'EXPROC',
                                   ACTRC_NO,C' '),X,
        ACTRC_HDR_RPTEXT,CHANGE=(6,ACTRC_YES,C'RPTEXT',
                                   ACTRC_NO,C' '),X,
        ACTRC_HDR_VRSEL,CHANGE=(5,ACTRC_YES,C'VRSEL',
                                   ACTRC_NO,C' '),X,
        ACTRC_HDR_DATE,CHANGE=(4,ACTRC_YES,C'DATE',
                                   ACTRC_NO,C' '),
        76:ACTRC_HDR_DATEFORM,CHANGE=(8,
        ACTRC_HDR_DATEFORM_AMERICAN,C'AMERICAN',
        ACTRC_HDR_DATEFORM_EUROPEAN,C'EUROPEAN',
        ACTRC_HDR_DATEFORM_ISO,C'ISO',
        ACTRC_HDR_DATEFORM_JULIAN,C'JULIAN'),X,
        85:ACTRC_HDR_VRSJOBNAME,
        96:ACTRC_HDR_VRSCHANGE,CHANGE=(6,
        ACTRC_HDR_VRSCHANGE_VERIFY,C'VERIFY',
        ACTRC_HDR_VRSCHANGE_INFO,C'INFO'), 96
        106:ACTRC_HDR_CATRETPD,
        115:ACTRC_HDR_VRSMIN_COUNT,
        128:ACTRC_HDR_VRSMIN_ACTION,CHANGE=(4,
        ACTRC_HDR_VRSMIN_ACTION_FAIL,C'FAIL',
        ACTRC_HDR_VRSMIN_ACTION_WARN,C'WARN',
        ACTRC_HDR_VRSMIN_ACTION_INFO,C'INFO'),
        142:ACTRC_HDR_OPT_VRSEL,CHANGE=(3,
        ACTRC_HDR_OPT_VRSEL_NEW,C'NEW',
        ACTRC_HDR_OPT_VRSEL_OLD,C'OLD',
        ACTRC_HDR_OPT_VRSEL_BLANK,C'OLD'),
        148:ACTRC_HDR_UNCATALOG,
        158:ACTRC_HDR_TPRACF,
        165:ACTRC_HDR_SYSID,
        174:ACTRC_HDR_CATSYSID,CHANGE=(8,
        ACTRC_HDR_CATSYSID_NOT_SET,C'NOT SET',
        ACTRC_HDR_CATSYSID_SET,C'SET',
        ACTRC_HDR_CATSYSID_SHARED,C'SHARED'),
        183:ACTRC_HDR_OPT_RETAINBY,CHANGE=(8,
        C' ',C' ',
        ACTRC_HDR_OPT_RETAINBY_VOLUME,C'VOLUME',
        ACTRC_HDR_OPT_RETAINBY_SET,C'SET'),
        192:ACTRC_HDR_OPT_MOVEBY,CHANGE=(8,
        C' ',C' ',
        ACTRC_HDR_OPT_MOVEBY_VOLUME,C'VOLUME',
        ACTRC_HDR_OPT_MOVEBY_SET,C'SET'))

```

Figure 66. JCL for EDGJACTP (Part 5 of 7)

```

OUTFIL FNames=VRST,
INCLUDE=(ACTRC_PRE_TYPE,EQ,ACTRC_PRE_TYPE_DSN,AND,
        ACTRC_DSN_CHNG_VRS,EQ,ACTRC_YES),
OUTREC=(ACTRC_RDW,
        ACTRC_PREFIX,
        ACTRC_DSN_DATA,
        ACTRC_DSN_VITAL,CHANGE=(9,
        ACTRC_DSN_VITAL_NY,ACTRC_DSN_VITAL_RETAIN,
        ACTRC_DSN_VITAL_YN,ACTRC_DSN_VITAL_DROPPED),
        ACTRC_DSN_DROP,CHANGE=(13,
        ACTRC_DSN_DROP_WHILECATALOG,C'WHILECATALOG',
        ACTRC_DSN_DROP_BLANK,C' ',
        ACTRC_DSN_DROP_UNTILEXPIRED,C'UNTILEXPIRED',
        ACTRC_DSN_DROP_CYCLES,C'CYCLES',
        ACTRC_DSN_DROP_DAYS,C'DAYS',
        ACTRC_DSN_DROP_LASTREF,C'LASTREFDAYS',
        ACTRC_DSN_DROP_EXTRADAYS,C'EXTRADAYS',
        ACTRC_DSN_DROP_BYDAYSCYCLE,C'BYDAYSCYCLE',
        ACTRC_DSN_DROP_NO_MATCH,C'NO MATCH',
        ACTRC_DSN_DROP_DUP_GDG,C'DUPL. GDG',
        ACTRC_DSN_DROP_VOL_RELEASED,C'VOL RELEASED'))

OUTFIL FNames=RETD,
INCLUDE=(ACTRC_PRE_TYPE,EQ,ACTRC_PRE_TYPE_DSN,AND,
        ACTRC_DSN_CHNG_RETDATE,EQ,ACTRC_YES)

OUTFIL FNames=MTCH,
INCLUDE=(ACTRC_PRE_TYPE,EQ,ACTRC_PRE_TYPE_DSN,AND,
        ACTRC_DSN_CHNG_MATCH,EQ,ACTRC_YES)

OUTFIL FNames=SUBC,
INCLUDE=(ACTRC_PRE_TYPE,EQ,ACTRC_PRE_TYPE_DSN,AND,
        ACTRC_DSN_CHNG_SUBCHAIN,EQ,ACTRC_YES)

```

Figure 66. JCL for EDGJACTP (Part 6 of 7)

```

        OPTION VLSHRT
//SRTVCNTL DD *
* Sort on status change fields
  SORT FIELDS=(ACTRC_DSN_OLD_VITAL,A,
               ACTRC_DSN_NEW_VITAL,A,
               ACTRC_DSN_DROP,A)
//SRTDCNTL DD *
* Sort on new retention date
  SORT FIELDS=(ACTRC_DSN_NEW_RETDATE,A)
//SRTMCNTL DD *      DFSORT STATEMENTS - SORT AND REFORMAT
* Sort on new matching VRS fields
  SORT FIELDS=(ACTRC_DSN_NEW_MTYPE,A,
               ACTRC_DSN_NEW_MMASK,A,
               ACTRC_DSN_NEW_MJOB,A)
//SRTCCNTL DD *      DFSORT STATEMENTS - SORT AND REFORMAT
* Sort on new subchain name and start date
  SORT FIELDS=(ACTRC_DSN_NEW_CHAINS,A)
/*
/**
//RUNINFO DD DSN=RMM.REPORT.RUNINFO,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),UNIT=SYSALLDA
//VRS      DD DSN=RMM.REPORT.VRS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//VRSS     DD DSN=RMM.REPORT.VRSS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//RETDATE  DD DSN=RMM.REPORT.RETDATE,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//RETDS    DD DSN=RMM.REPORT.RETDS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//MATCHVRS DD DSN=RMM.REPORT.MATCHVRS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//MATCHVVS DD DSN=RMM.REPORT.MATCHVVS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//SUBCHN   DD DSN=RMM.REPORT.SUBCHN,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA
//SUBCHNS  DD DSN=RMM.REPORT.SUBCHNS,DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(9,9),RLSE),UNIT=SYSALLDA

```

Figure 66. JCL for EDGJACTP (Part 7 of 7)

Chapter 4. Creating Reports with DFSMSrmm Utilities

The DFSMSrmm report utilities EDGRPTD and EDGAUD help you keep track of your removable media inventory and monitor access to classified tape data. Table 6 shows information that you can obtain using EDGRPTD and EDGAUD.

Table 6. DFSMSrmm Report Utilities and Samples

To Obtain	Use	Which Requires the
Inventory, movement, and scratch reports	EDGRPTD described on page 61	Extract data set
Audit reports and security reports using System Management Facility (SMF) records	EDGAUD described on page 72	SMF data set

You can write customized reports by using DFSORT's ICETOOL. For information on using DFSORT's ICETOOL, see Chapter 6, "Using DFSMSrmm with DFSORT", on page 113.

Using EDGRPTD to Create Reports

The DFSMSrmm utility EDGRPTD produces reports from the extract data set created using the EDGHSKP utility. Run storage location management before you create the extract data set to ensure that the extract data set contains the most current information about volumes that should move within the library, between the library and storage locations, or among storage locations. Use EDGRPTD to create inventory reports, movement reports, and scratch list reports.

- Inventory reports for auditing the physical contents of the installation media library and storage locations. See "Using Inventory Reports" on page 65.
- Movement reports that list volumes to be moved from one location to another. Use these reports to make an inventory of your volumes and to identify volumes that need to be pulled and moved to other locations. See "Using Movement Reports" on page 68.
- Scratch list reports that list scratch volumes in your installation. You can list all scratch volumes and new scratch volumes. See "Using Scratch List Reports" on page 70.

EDGRPTD reads the volume records from the extract data set and uses DFSORT to order the records to produce the reports you request.

You do not need to provide DFSORT parameters or work data sets because EDGRPTD specifies the necessary parameters for DFSORT and requests dynamic allocation of work data sets. You can combine the production of scratch reports with movement reports and inventory reports in the same run of EDGRPTD.

JCL for EDGRPTD

To create a report, submit a job with JCL, as shown in Figure 67.

```
//D021906H JOB ('T,H,IOM,,',SYSPROG),'***IBMUSER***',
// MSGLEVEL=(1,1),MSGCLASS=H,CLASS=S,REGION=4096K,
// NOTIFY=D021906
//RPTD EXEC PGM=EDGRPTD,
// PARM='SEC('INTERNAL USE ONLY'),DATEFORM(I),
// LINECOUNT(54)'
//REPTXT DD DISP=SHR,DSN=RMMTST.PR0914X.REPTXT
//SYSPRINT DD SYSOUT=*
//INSTVOL DD DISP=SHR,DSN=RMMTST.REPORT.INSTVOL
//INSTBIN DD DISP=SHR,DSN=RMMTST.REPORT.INSTBIN
//INSTOWN DD DISP=SHR,DSN=RMMTST.REPORT.INSTOWN
//TOSTRCK DD DISP=SHR,DSN=RMMTST.REPORT.TOSTRCK
//TOSTOWN DD DISP=SHR,DSN=RMMTST.REPORT.TOSTOWN
//FMSTBIN DD DISP=SHR,DSN=RMMTST.REPORT.FMSTBIN
//FMSTOWN DD DISP=SHR,DSN=RMMTST.REPORT.FMSTOWN
//RDYTOSCR DD DISP=SHR,DSN=RMMTST.REPORT.RDYTOSCR
//SYSOUT DD DISP=SHR,DSN=RMMTST.REPORT.DFSORT
//SCRDATE DD DSN=rmm.last.run.date,DISP=OLD
//SCRLIST DD DISP=(,CATLG),DSN=rmm.scratch.list,
// UNIT=SYSDA,SPACE=(TRK,(10,10)),LRECL=121,RECFM=VBA
//NEWSCR DD DISP=(,CATLG),DSN=rmm.new.scratch.list,
// UNIT=SYSDA,SPACE=(TRK,(10,10)),LRECL=121,RECFM=VBA
```

Figure 67. Example of JCL for EDGRPTD -Creating Inventory, Movement, and Scratch List Reports

Note that each DD statement is optional and needs to be specified only for the reports you want.

EXEC Parameters for EDGRPTD

Figure 68 shows the EXEC parameters for EDGRPTD.

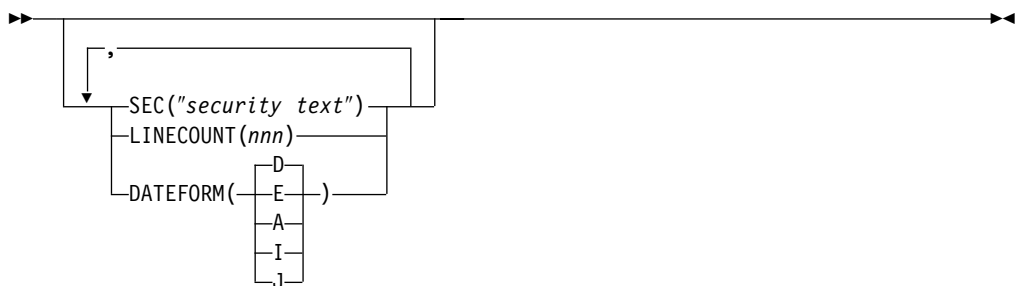


Figure 68. EDGRPTD EXEC Parameters

The EXEC parameters for EDGRPTD are:

DATEFORM(A|E||J|D)

Use the DATEFORM parameter to specify the format for date fields in the report. The DATEFORM parameter can be:

Value	Language	Format	Example
A	American	mm/dd/yyyy	12/15/2000
E	European	dd/mm/yyyy	15/12/2000

Value	Language	Format	Example
I	International Organization for Standardization (ISO)	yyyy/mm/dd	2000/12/15
J	Julian	yyyy/ddd	2000/350
D	Default	Installation default in EDGRMMxx	Initially set to Julian

LINECOUNT(*nnn*)

nnn specifies the number of lines per page for reports, including the heading and trailer lines. Specify a value between 10 and 999. Specify LINECOUNT to override the LINECOUNT value specified by the LINECOUNT operand of the EDGRMMxx parmlib member OPTION command. See *z/OS DFSMSrmm Implementation and Customization Guide* for information about the LINECOUNT operand.

The default is 54 lines per page.

SEC("security text")

Specify up to 32 characters of security heading text for the reports. If the text contains blanks or special characters, enclose it in double quotes when specifying blanks or special characters.

DD Statements for Input and Output

The DD statements you code for input and output are:

REPTEXT

REPTEXT is an input file that contains the DFSMSrmm extract data set used to create reports. REPTEXT is required.

SYSOUT

SYSOUT is an output file used by the sort program. It contains information for sorting that is performed by EDGRPTD.

SYSPRINT

SYSPRINT is an output file for the messages DFSMSrmm issues for EDGRPTD. SYSPRINT is required.

DD Statements for Inventory Reports

The DD statements you can code for inventory reports are:

INSTVOL

INSTVOL is an output file for the report. INSTVOL contains the inventory of volumes by location that is sorted by volume serial number.

INSTBIN

INSTBIN is an output file for the report containing the inventory of volumes by location that is sorted by rack number or bin number. The storage location report is sorted by bin number. All other reports are sorted by rack number.

INSTOWN

INSTOWN is an output file for the report containing the inventory of volumes by location that is sorted by owner.

DD Statements for Movement Reports

The DD statements you can code for movement reports are:

RDYTOSCR

RDYTOSCR is an output file for movement reports. It is sorted in ascending order. The rack report column contains either a bin or rack number.

RDYTOSCR includes information about volumes to be moved from locations to home locations. DFSMSrmm excludes volumes listed in the Ready-To-Scratch report from either the TOSTRCK or FMSTBIN report.

TOSTRCK

TOSTRCK is an output file for movement reports that are sorted by rack number. TOSTRCK includes information about:

- Volumes to be moved from SHELF to storage locations
- Volumes to be moved between system-managed libraries
- Volumes to be moved from system-managed libraries to storage locations

FMSTBIN

FMSTBIN is an output file for movement reports that are sorted by bin number. FMSTBIN includes information about:

- Volumes to be moved between storage locations
- Volumes to be moved from storage locations to SHELF
- Volumes to be moved from storage locations to system-managed tape libraries

TOSTOWN

TOSTOWN is an output file for movement reports that are sorted by owner. TOSTOWN includes information about:

- Volumes to be moved from SHELF to storage location
- Volumes to be moved from system-managed libraries to storage locations
- Volumes to be moved between system-managed libraries

FMSTOWN

FMSTOWN is an output file for movement reports that are sorted by owner. FMSTOWN includes information about:

- Volumes to be moved from storage locations to SHELF
- Volumes to be moved from storage locations to system-managed libraries
- Volumes to be moved between storage locations

DD Statements for Scratch List Reports

The DD statements you can code for scratch list reports are:

NEWSCR

NEWSCR is the output file for the listing of all scratch volumes returned to scratch status since the last scratch list was produced. DFSMSrmm produces the NEWSCR file when there is a valid date and time in the SCRDATE file or the SCRDATE file contains no record.

SCRDATE

This file is used to produce the scratch list report. Each time a scratch list report is produced, DFSMSrmm updates the SCRDATE file with the highest scratch date and time for a volume. DFSMSrmm uses the date and time to determine which volumes to include in the new scratch list report. DFSMSrmm includes all scratch volumes with a newer assigned date and time in the new scratch listings. You can edit the SCRDATE file, which is a single record of LRECL 80 that contains a 10-character date and an eight-character time in external format. The date format must be the same format you specified for EDGRPTD. DFSMSrmm produces a new scratch list report only if there is a valid date or time for a volume. If there is no date or time, or the date is not valid, DFSMSrmm does not produce a new scratch list but produces a full scratch listing only in the SCRLIST DD. If the SCRDATE file is empty, the NEWSCR and SCRLIST reports are identical, and DFSMSrmm writes the highest scratch date and time to the SCRDATE file.

Here is an example of the 80 byte input record.

```
01/12/200023:01:00
```

This example uses American date format. The date is 10 characters long and must start in column 1. The time is 8 characters and starts in column 11. The SCRDATE file can be a new data set or an existing data set. Do not specify the date and time in the JCL using DD * because EDGRPTD updates the file with the highest scratch date and time.

The SCRLIST DD can be in any format, even a partitioned data set (PDS) member. The SCRDATE DD can be preallocated with any disposition.

SCRLIST

Output file for the full scratch list report.

Using Inventory Reports

You can use inventory reports for performing audits of your library and storage locations. To obtain the most up-to-date inventory report, move all volumes that are in transit and confirm all moves as completed before producing the extract data set from which you produce audit reports.

Non-shelf-managed locations do not have bin numbers. Inventory reports list a bin number column, leaving the bin number field blank.

You can use the inventory reports to track logical volumes. DFSMSrmm lists all the logical and stacked volumes in the library. When you request an inventory of a VTS location, DFSMSrmm lists all the logical volumes in the library. For exported logical volumes, DFSMSrmm lists the stacked volume in the report rather than the exported logical volume.

DFSMSrmm produces inventory reports in INSTVOL, INSTBIN, INSTOWN output files, as described in “DD Statements for Inventory Reports” on page 63. Each output file can contain multiple reports.

DFSMSrmm produces a separate report for each location where volumes reside. The reports, as shown in Figure 69 on page 66, are composed of repeated data columns. The data columns are:

VOLUME

The volume serial number

RACK

The rack number and external volume serial number

BIN

The bin number in which the volume resides

OWNER

The owner of the volume

MEDIANAME

The media name or type of media of the volume

T The volume in-transit status can be one of the following:

- N** The volume is not in transit or waiting to be moved so you should expect to find the volume in the location identified by the inventory report.
- I** The volume is moving to the listed shelf location. DFSMSrmm lists the volume in the report for the current location of the volume, as well as the target location.

- The volume is moving from the listed shelf location. DFSMSrmm lists the volume in the report for the current location of the volume, as well as the target location.

Because volumes that are in transit can appear in multiple reports, you must determine the location of those volumes based on your installation's movement process.

Figure 69 is an example of an inventory report that was created using EDGRPTD. The example shows the inventory for the DFSMSrmm built-in storage locations LOCAL, DISTANT, and REMOTE; the installation-defined storage location named DPBINS, and the location SHELF. See "Using Movement Reports" on page 68 for information about obtaining movement information.

IBM INTERNAL USE

REMOVABLE MEDIA MANAGER					INVENTORY OF VOLUMES IN LOCATION LOCAL					PAGE 1				
5647-A01 (C) Copyright IBM Corp. 1993,2000					-----					DATE 2000/06/14				
VOLUME	RACK	BIN	OWNER	MEDIANAME T	VOLUME	RACK	BIN	OWNER	MEDIANAME T	VOLUME	RACK	BIN	OWNER	MEDIANAME T

A00231	A00231	18	D044412	N										
A00400	A00400	14	D094746	N										
A00469	A00469	2	D094746	N										
A00472	A00472	7	D094746	N										
A04061	A04061	13	LYONS	N										
MAX006	MAX006	16	MAXWEAD	N										
WK0005	WK0005	1	D094746	0										
WK0009	WK0009	3	D094746	0										

TOTAL NUMBER OF ENTRIES LISTED = 8

Figure 69. Volume Inventory Report (Part 1 of 5)

IBM INTERNAL USE

REMOVABLE MEDIA MANAGER					INVENTORY OF VOLUMES IN LOCATION DISTANT					PAGE 1				
5647-A01 (C) Copyright IBM Corp. 1993,2000					-----					DATE 2000/06/14				
VOLUME	RACK	BIN	OWNER	MEDIANAME T	VOLUME	RACK	BIN	OWNER	MEDIANAME T	VOLUME	RACK	BIN	OWNER	MEDIANAME T

A00003	A00003	13	@@@OWNER	0										
A00471	A00471	20	D094746	I										
A01128	A01128	4	D094746	0										
A01658	A01658	5	D094746	0										
A01668	A01668	6	D094746	0										
A01669	A01669	7	D094746	0										

TOTAL NUMBER OF ENTRIES LISTED = 6

Figure 69. Volume Inventory Report (Part 2 of 5)

IBM INTERNAL USE

REMOVABLE MEDIA MANAGER INVENTORY OF VOLUMES IN LOCATION REMOTE PAGE 1
 5647-A01 (C) Copyright IBM Corp. 1993,2000 ----- DATE 2000/06/14

VOLUME	RACK	BIN	OWNER	MEDIANAME	T	VOLUME	RACK	BIN	OWNER	MEDIANAME	T	VOLUME	RACK	BIN	OWNER	MEDIANAME	T
ABC012	D65B35		4	MAXWEAD	I												
ABC013	D65B36		5	MAXWEAD	I												
A00470	A00470		6	D094746	I												
A01345	A01345		15	CRUMPM	0												
FOK004	FOK004		1	MAXWEAL	0												
FOK005	FOK005		7	MAXWEAL	0												
RMX001	RMX001		2	MAXWEAD	0												
RMX002	RMX002		9	MAXWEAD	I												

TOTAL NUMBER OF ENTRIES LISTED = 8

Figure 69. Volume Inventory Report (Part 3 of 5)

IBM INTERNAL USE

REMOVABLE MEDIA MANAGER INVENTORY OF VOLUMES IN LOCATION DPBINS PAGE 1
 5647-A01 (C) Copyright IBM Corp. 1993,2000 ----- DATE 2000/06/14

VOLUME	RACK	BIN	OWNER	MEDIANAME	T	VOLUME	RACK	BIN	OWNER	MEDIANAME	T	VOLUME	RACK	BIN	OWNER	MEDIANAME	T
RMX002	RMX002	ADPB01		MAXWEAD	3480	0											
RMX003	RMX003	ABD002		MAXWEAD	3480	I											
RMX004	RMX004	ABD003		MAXWEAD	3480	I											
RMX005	RMX005	ABD004		MAXWEAD	3480	I											
RMX006	RMX006	ABD009		MAXWEAD	3480	I											
RMX007	RMX007	ABD012		MAXWEAD	3480	I											

TOTAL NUMBER OF ENTRIES LISTED = 6

Figure 69. Volume Inventory Report (Part 4 of 5)

1

IBM INTERNAL USE

REMOVABLE MEDIA MANAGER INVENTORY OF VOLUMES IN LOCATION SHELF PAGE 1
 5647-A01 (C) Copyright IBM Corp. 1993,2000 ----- DATE 2000/06/14

VOLUME	RACK	OWNER	MEDIANAME	T	VOLUME	RACK	OWNER	MEDIANAME	T	VOLUME	RACK	OWNER	MEDIANAME	T
ABC002	ABC002	MAXWEAD		N	ABC049	JS0205			N	A00047	A00047			N
ABC006	DAMW08			N	ABC050	JS0206			N	A00048	A00048			N
ABC007	DAMW09			N	ABC051	JS0207			N	A00049	A00049			N
ABC008	D65B31			N	ABC052	JS0208			N	A00051	A00051			N
ABC009	D65B32			N	ABC053	JS0209			N	A00052	A00052			N
ABC010	D65B33			N	ABC055	RMM000			N	A00053	A00053			N
ABC011	D65B34			N	ABC056	RMM001			N	A00054	A00054			N

TOTAL NUMBER OF ENTRIES LISTED = 7

Figure 69. Volume Inventory Report (Part 5 of 5)

Using Movement Reports

DFSMSrmm produces movement reports in the output files named TOSTRCK, TOSTOWN, RDYTOSCR, FMSTBIN, and FMSTOWN as described in “DD Statements for Movement Reports” on page 63. Each output file can contain multiple reports with each report covering a specific pair of locations.

To ensure that the control data set reflects current information, confirm that you have moved the required volumes before creating the movement reports. Confirm that you have moved the volumes by using the RMM CHANGEVOLUME subcommand with the CONFIRMMOVE operand or by using the DFSMSrmm ISPF dialog.

DFSMSrmm excludes volumes that are in a container from movement reports. DFSMSrmm lists the stacked volume instead.

You can use movement reports to identify volumes that need to be moved from one location to another. DFSMSrmm produces reports only if there are volumes to be moved. DFSMSrmm starts a new page and a report for each location and destination pair. Each report as shown in Figure 70 on page 69 is composed of repeated data columns. The data columns are:

BIN

The bin number from which the volume is to be moved

VOLUME

The volume serial number

RACK

The rack number and external volume serial number

OWNER

The owner of the volume

MEDIANAME

The media name or type of media of the volume

T The in-transit status of the volume. Y indicates that the volume is moving. N indicates that the volume currently resides in a system-managed library and must be ejected before it can be moved.

TOBIN

The target bin number

Figure 70 on page 69 is a movement report showing volumes to be moved from the storage location LOCAL to a library named ATL1.

```

1                                IBM INTERNAL USE

REMOVABLE MEDIA MANAGER          VOLUMES TO BE MOVED FROM LOCATION LOCAL    TO LOCATION ATL1    PAGE      1
5647-A01 (C) Copyright IBM Corp. 1993,2000  -----
BIN  VOLUME RACK  OWNER  MEDIUMNAME T  BIN  VOLUME RACK  OWNER  MEDIUMNAME T  BIN  VOLUME RACK  OWNER  MEDIUMNAME T
-----
12 C00123 C00123 GARROTTO      3480 Y
13 C00125 C00125 GLYN          3480 Y
17 C00789 C00789 WANGSP       3480 Y
21 C00801 C00801 GARROTTO      3480 Y
24 C00946 C00946 KAHIL         3480 Y
36 C01247 C01246 WANGSP       3480 Y
44 C01249 C01249 TOMKINI       3480 Y
45 C01256 C01256 FLECK         3480 Y
46 C01257 C01257 MBAKER         3480 Y

```

Figure 70. Volume Movement Report

Figure 71 is a movement report that shows volumes that are ready-to-scratch volumes. You can use this report to separate volumes that require release actions prior to release from volumes that can be returned directly to scratch status. See “Using Movement Reports” on page 68 for a description of the columns in the report.

```

1                                RTS-USE-ONLY

REMOVABLE MEDIA MANAGER          VOLUMES TO BE MOVED FROM LOCATION LOCAL    TO LOCATION SHELF    PAGE      1
5647-A01 (C) Copyright IBM Corp. 1993,2000  -----
BIN  VOLUME RACK  OWNER  MEDIUMNAME T  BIN  VOLUME RACK  OWNER  MEDIUMNAME T  BIN  VOLUME RACK  OWNER  MEDIUMNAME T
-----
2 SRT020 SRT020 D041044      Y
3 SRT022 SRT022 D041044      Y
6 SRT026 SRT026 D041044      Y
9 SRT029 SRT029 D041044      Y
10 SRT030 SRT030 D041044      Y
15 SRT043 SRT043 D041044      Y

```

TOTAL NUMBER OF ENTRIES LISTED = 6

Figure 71. Movement Report for Ready to Scratch Volumes

When you request the Ready-to-Scratch volume report along with the movement reports, DFSMSrmm excludes the volumes that are identified with the return-to-scratch status from the movement reports.

Creating Scratch List Reports

You can create reports that list scratch volumes by specifying the NEWSR and SCRLIST output files. The contents of the reports is controlled by the volume scratch date and time information in the SCRDATE. For information about the NEWSR file, the SCRLIST file, and the SCRDATE file, see “DD Statements for Scratch List Reports” on page 64. You can produce scratch reports with movement reports and inventory reports in the same run of EDGRPTD.

The NEWSR and SCRLIST reports use the same format. DFSMSrmm starts a new page for each scratch pool or storage group. The reports list volumes within a storage group by storage group and location. The reports list volumes with no storage group by storage group when the matching pool has a NAME value. The report lists the remaining scratch volumes by matching pool prefix and location.

Use the new scratch list report (NEWSR) to list volumes that were returned to scratch status since the last time you ran the scratch list report. Specify a date and time in the SCRDATE file to control the list of volumes that DFSMSrmm returns in the NEWSR file. To create a report that only lists new scratch volumes that were returned to scratch since the last time you requested a scratch list, specify a date and time in the SCRDATE file. To obtain a report that contains all the volumes that are in scratch status, specify an empty SCRDATE file.

To create a report that contains just the new scratch volumes you can choose one of the following options:

1. Use the RMM LISTCONTROL subcommand to obtain the last run date and time of expiration processing. Specify this date and time in the SCRDATE file. If you specify the last run date and time of expiration processing, DFSMSrmm lists all volumes that have returned to scratch status during or since the last run of expiration processing.
2. Use the EDGRPTD utility with at least one inventory management run before you start using the new scratch list. When you run EDGRPTD before you start using the new scratch list, DFSMSrmm produces a new scratch report that contains all the volumes in scratch status. During the first run, DFSMSrmm sets the date and time in the SCRDATE file. This ensures that the next time you run EDGRPTD, such as after the next expiration processing run, DFSMSrmm produces a report that contains only new scratch volumes.

Use the scratch list report (SCRLIST) to list all of the volumes in scratch status. DFSMSrmm returns all the volumes that are in scratch status at the time you run the job. The scratch list report includes all the information available at the time you run the report. As a result, you might find differences between the information in the report and the information in the DFSMSrmm control data set. For example, the volume information in the scratch list report might not reflect the scratch volumes that have been used or the volumes that were made available as part of expiration processing. Both of these events can change information in the control data set that might not be reflected in the report.

Using Scratch List Reports

You can use scratch list reports to identify volumes that can be used to satisfy scratch requests. Each report consists of data columns, as shown in Figure 72 on page 71. The data columns are:

VOLUME

The volume serial number.

RACK

The rack number and external volume serial number.

MEDIANAME

The media name of the volume. Your installation defines the media name. MEDIANAME identifies the shelving characteristics of the media such as size or shape.

SCRATCH DATE+TIME

The date and time when the volume returned to scratch status.

LOCATION

The location where the volume resides.

DATA SET NAME

The data set name of the first file on the volume.

VSEQ

The volume sequence number.

DSEQ

The data set sequence number on the named volume.

MEDIATYPE

The physical media type of the volume.

Figure 72 is an example of a scratch list report.

```

                                CENTERED CLASSIFICATION
REMOVABLE MEDIA MANAGER          SCRATCH VOLUMES BY POOL NAME REDSTRIP          PAGE          1
5647-A01 (C) Copyright IBM Corporation 2000 ----- DATE 2001/01/01
VOLSER RACK  MEDIANAME SCRATCH DATE+TIME  LOCATION DATA SET NAME          VSEQ DSEQ MEDIATYPE
-----
ABC123 ABC123 CARTS    1999/12/01 11:23:00 SHELF  MYDSN.WAS.KEPT          2   1 ECCST
TOTAL NUMBER OF ENTRIES LISTED = 1

```

Figure 72. Scratch List Report

Figure 73 is an example of a new scratch list report.

```

                                CENTERED CLASSIFICATION
REMOVABLE MEDIA MANAGER          NEW SCRATCH VOLUMES SINCE 1999/11/28 08:00:03 POOL NAME REDSTRIP          PAGE          1
5647-A01 (C) Copyright IBM Corporation 2000 ----- DATE 2001/01/01
VOLSER RACK  MEDIANAME SCRATCH DATE+TIME  LOCATION DATA SET NAME          VSEQ DSEQ MEDIATYPE
-----
999123 999123 CARTS    1999/12/01 11:23:00 MTL    MYDSN.WAS.KEPT          2   3 HPCT
TOTAL NUMBER OF ENTRIES LISTED = 1

```

Figure 73. New Scratch List Report

Return Codes for EDGRPTD

EDGRPTD issues one of the return codes that are shown in Table 7.

Table 7. EDGRPTD Return Codes

Return Code	Explanation
0	All requested functions completed successfully.
4	DFSMSrmm encountered a minor error during processing. It issues a warning message and continues processing.
12	DFSMSrmm encountered a severe error during processing of one of the requested functions. DFSMSrmm stops the utility.
16	DFSMSrmm encountered a severe error during a required communication with the DFSMSrmm subsystem. DFSMSrmm stops the utility.

Using EDGAUD to Create Security and Audit Reports

Use the EDGAUD utility to create security and audit reports, using either previously selected and sorted SMF records or raw SMF data. DFSMSrmm produces SMF records when you specify the DFSMSrmm EDGRMMxx parmlib OPTION SMFAUD or SMFSEC operands. See *z/OS DFSMSrmm Implementation and Customization Guide* for information about the SMFAUD option and the SMFSEC option. DFSMSrmm uses the default report options and the current SMF record types unless you override them with the EDGAUD EXEC parameters.

The EDGAUD utility reads the SMFIN file and selects records that are based on the processing criteria. The utility uses DFSORT to order the records to produce the reports you request.

You do not need to provide DFSORT parameters or work data sets. EDGAUD specifies the necessary parameters for DFSORT and requests dynamic allocation of work data sets.

For the security report, DFSMSrmm produces one line in the report for each security SMF record found in the input file.

For the audit report, DFSMSrmm can generate multiple report lines for each selected SMF record. For example, DFSMSrmm produces a line in the volume report, the rack number report, and the user ID report with an SMF record for a volume that has been updated.

JCL for EDGAUD

To create a security or audit report, submit a job with JCL, as shown in Figure 74.

```
//AUDREPT EXEC PGM=EDGAUD,  
//      PARM='SMFAUD(nnn),SMFSEC(nnn),SEC("security classification")'  
//SYSPRINT DD program messages  
//SMFIN DD input data set of SMF records  
//AUDREPT DD audit report  
//SECREPT DD security report  
//SYSOUT DD DFSORT messages  
//SYSIN DD select statements for audit report
```

Figure 74. JCL for EDGAUD

EXEC Parameters for EDGAUD

Figure 75 on page 73 shows the EXEC parameters for EDGAUD.

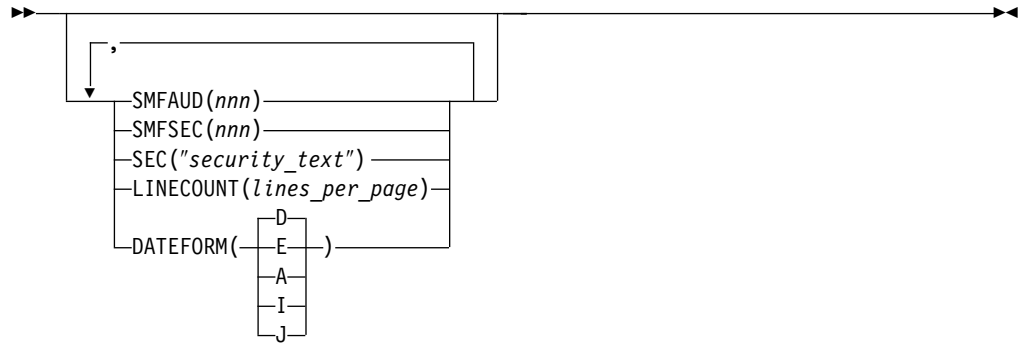


Figure 75. EDGAUD EXEC Parameters

The EXEC parameters for EDGAUD are:

DATEFORM (A|E|I|J|D)

Use this parameter to set the date format for reports.

Value	Language	Format	Example
A	American	mm/dd/yyyy	12/15/2000
E	European	dd/mm/yyyy	15/12/2000
I	ISO	yyyy/mm/dd	2000/12/15
J	Julian	yyyy/ddd	2000/350
D	Default	Installation default in EDGRMMxx	Initially set to Julian

LINECOUNT(lines_per_page)

Specifies the page length. The default is 54 lines per page.

SEC('security_text')

Specifies the security heading text for the reports. Specify up to 32 characters and, if the text contains blanks or special characters, enclose it in double quotes.

SMFAUD(nnn)

Specifies a number that represents the SMF record number to be used to select data for reporting. Specify SMFAUD to override the current subsystem startup option value.

SMFSEC(nnn)

Specifies a number that represents the SMF record number to be used to select data for reporting. Specify SMFSEC to override the current subsystem startup option value.

DD Statements for EDGAUD

The DD statements are as follows:

SYSPRINT

SYSPRINT specifies program and information messages. This DD statement is required.

SMFIN

SMFIN specifies the SMF record input data set. This DD statement is required.

AUDREPT

AUDREPT specifies that you want to create an audit report in this data set.

DFSMSrmm does not produce a report unless you specify this DD statement. The report data set record length is 132 characters. This DD statement is optional.

SECRET

SECRET specifies that you want to create a security report in this data set. DFSMSrmm does not produce a report unless you specify this DD statement. The report data set record length is 132 characters. This DD statement is optional.

SYSOUT

SYSOUT specifies an output file for DFSORT messages. The SYSOUT DD statement is required; the job fails if you do not specify it. If you do not want to see the DFSORT messages, you can use:

```
//SYSOUT DD DUMMY
```

. Alternatively, you can use:

```
//DFSPARM DD *
MSGPRT=NONE
/*
```

to tell DFSORT not to print any messages or:

```
//DFSPARM DD *
MSGPRT=CRITICAL,NOLIST
/*
```

to tell DFSORT to print only error messages, if any.

SYSIN

Specifies select statements for the audit report, which you specify with the AUDREPT DD statement. The select statements help you tailor the report. This DD statement is optional.

SYSIN Commands for EDGAUD

Figure 76 shows the format of the audit report selection options that you can supply for SYSIN.

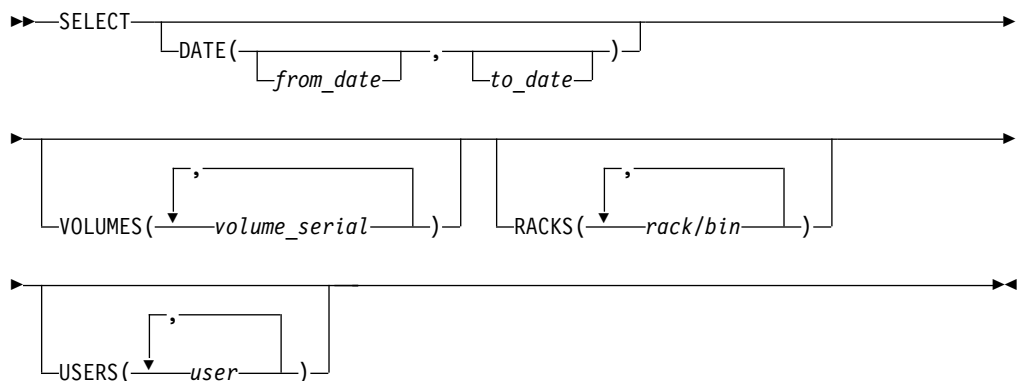


Figure 76. EDGAUD SYSIN Commands

All SYSIN commands are optional, and you can specify them in any order, except for SELECT. You must always specify SELECT first if you use any other commands, as shown in Figure 77 on page 75.

```

//S1SMF03 JOB 'SMF/S1SMF03',NOTIFY=LYONS,CLASS=A,USER=LYONS,
//          PASSWORD=LYONS,MSGLEVEL=(1,1),MSGCLASS=H,REGION=4M
//AUDREPT EXEC PGM=EDGAUD,
//          PARM='SMFAUD(248),SMFSEC(249),SEC(IU0),DATEFORM(A)'
//SYSPRINT DD SYSOUT=*
//SMFIN DD DISP=SHR,DSN=RMMTST.S1SMF02.MANXY
//AUDREPT DD DISP=(NEW,CATLG),UNIT=SYSDA,
//          DSN=RMMTST.S1SMF03.AUDREPT,
//          SPACE=(4096,(10,1),RLSE)
//SECREPT DD DISP=(NEW,CATLG),UNIT=SYSDA,
//          DSN=RMMTST.S1SMF03.SECREPT,
//          SPACE=(4096,(10,1),RLSE)
//SYSOUT DD DUMMY
//SYSIN DD *
SELECT DATE(02/21/2002,02/24/2002) -
VOLUMES(A0423*,A0433*) RACK(A0423*,A0433*) -
USERS(LYONS,RMMU001,SMFU001,SMFU002,SMFU003)

```

Figure 77. Example of JCL for Using the SELECT SYSIN

If you do not specify VOLUMES, USERS, or RACKS, DFSMSrmm produces all three reports within the specified date range. Otherwise, DFSMSrmm produces only the report types you request. If you do not specify DATE, all the input records selected are subject to other selection criteria you have specified.

SELECT

SELECT is not required but you must specify SELECT if you want to limit the type of reports or contents of reports.

DATE(*from_date,to_date*)

Specify the date range of records to be selected for use in audit reports. The format of the date values is either as specified by the DATEFORM parameter or (if DATEFORM is not specified) as set by the DATEFORM parameter value defined by the installation. For example, if your installation set DATEFORM(J), specify:

```
DATE(2002/123,2002/223)
```

RACKS(*rack|bin*)

Specify to limit the report to specific rack numbers or bin numbers. A rack number is six alphanumeric, national, or special characters in any combination. A bin number is six alphanumeric or national characters in any combination. You can specify a list of values.

VOLUMES(*volume_identifier*)

Specify to limit the report to specific volumes. A volume serial is one to six alphanumeric, national, or special characters. You can specify a list of values.

USERS(*user*)

Specify to include only those changes made by specific users in the report. A user is any valid user ID. You can specify a list of users.

You can specify generic volume, rack, or user information. For example, you can specify VOLUMES(ABC*) to request all the volumes with volume serial number that start with 'ABC'.

Using the Security Report

Secure volumes are volumes you identify using the SECCLS parmlib command described in *z/OS DFSMSrmm Implementation and Customization Guide*. When you specify SMF(Y), DFSMSrmm creates an SMF record each time a data set is

created, deleted, or referenced. The security report provides tracking information for the classified tape data you have identified.

You can use the security report to identify classified tape data sets that have been used for input or output. You can use the security report to keep track of accesses to secure volumes in your installation.

The security report, as shown in Figure 78 on page 77, is comprised of the following data columns:

DATA SET NAME

Classified data set name

VOLUME

Volume where the data set resides

VSQ

Volume serial number

DSQ

Data set sequence number

MEDIA

The installation-defined media name

ACTION

The action taken on the data set, which can be CREATE, READ, UPDATE, or DELETE

SECURITY

The highest security class of the volume when a data set was written.

GROUP

The current RACF connect group at the time the access was made.

USERID

The RACF user ID for the user who accessed the data set

SYST

The SMF system identifier

DATE

The date when the data set was accessed

TIME

The time when the data set was accessed

Figure 78 on page 77 shows excerpts from a security report.

DATA SET NAME	VOLUME	VSQ	DSQ	MEDIA	ACTION	SECURITY	GROUP	USERID	SYST	DATE	TIME	
USERJOY.S1ATL026.D65DM1.BACKUP	002030	1	2	3490	CREATE	SECURE	SYS1	DILE	3090	02/23/2000	16:22:28	
USERJOY.S1ATL026.D65DM1.BACKUP	002031	2	2	3490	CREATE	SECURE	SYS1	DILE	3090	02/23/2000	16:28:25	
USERJOY.S1ATL026.D65DM1.BACKUP	002033	3	2	3490	CREATE	SECURE	SYS1	DILE	3090	02/23/2000	16:35:02	
USERJOY.S1ATL026.USRPKC.BACKUP	002030	1	1	3490	CREATE	SECURE	SYS1	DILE	3090	02/19/2000	14:50:50	
USERJOY.S1ATL026.USRPKC.BACKUP	002030	1	1	3490	CREATE	SECURE	SYS1	MIKE	3090	02/19/2000	15:15:11	
USERJOY.S1ATL026.USRPKC.BACKUP	002030	1	1	3490	CREATE	SECURE	SYS1	DILE	3090	02/23/2000	16:17:37	
RMMU001.RAC005.DS1	A00099	1	1	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/19/2000	11:06:46	
RMMU001.RAC005.DS1	123456	1	1	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/19/2000	14:19:12	
RMMU001.RAC005.DS1	A04101	1	1	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/22/2000	11:08:05	
RMMU001.RAC005.DS1	A04101	1	1	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/22/2000	13:14:28	
RMMU001.RAC005.DS2	A00099	1	2	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/19/2000	11:06:48	
RMMU001.RAC005.DS2	123456	1	2	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/19/2000	14:19:14	
RMMU001.RAC005.DS2	A04101	1	2	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/22/2000	11:08:07	
RMMU001.RAC005.DS2	A04101	1	2	3480	CREATE	GENERAL	D65RMM	RMMU001	3090	02/22/2000	13:14:29	
CAUDILL.S1VVA09.V1F1	A04201	1	1	3480	CREATE	CLASS11	SYS1	LYONS	3090	02/23/2000	16:48:24	
CAUDILL.S1VVA09.V1F1	A04201	1	1	3480	CREATE	CLASS11	SYS1	LYONS	3090	02/23/2000	16:56:46	
CAUDILL.S1VVA09.V2F1	A04301	1	1	3480	CREATE	CLASS11	SYS1	LYONS	3090	02/23/2000	16:53:47	
TOTAL NUMBER OF ENTRIES LISTED =		18										

Figure 78. Report of Access to Secure Volumes

Using the Audit Report

The audit report enables you to track changes to the control data set, identify inadvertent changes, and recover lost volumes. DFSMSrmm creates an audit SMF record whenever information about a volume, a rack number, or bin number changes in the control data set. With EDGAUD, you can create reports that list the changes that have been made in the control data set.

The basic audit report consists of as many as three individual reports, depending on report types you request. The individual reports are the VOLUME report, the RACK/BIN report, and the USERID report.

- VOLUME report

DFSMSrmm adds a report line in the volume report only when volume information changes. The volume report is sorted by volume serial number.

- RACK/BIN report

DFSMSrmm updates information in this report when volume information and rack or bin number information change. The rack/bin report is sorted by rack or bin number.

- USERID report

DFSMSrmm updates information in this report when volume information and rack or bin number information change. The userid report is sorted by user ID.

Changes to volume information can affect more than the volume report. For example, the EDGAUD utility makes the following audit report entries when a volume is added to the library:

- A volume line in the VOLUME report
- A volume line in the RACK/BIN report
- A volume line in the USERID report
- A report line for deletion of an empty rack number in the RACK/BIN report
- A report line for creation of an in-use rack number in the RACK/BIN report

When a volume is in the process of being moved, DFSMSrmm marks the location field in the audit report with the '<' character, as shown in Figure 79 on page 79. This marks the location as the one from which the volume is moving.

The audit report columns include:

VOLUME

Volume serial number.

RACK

Rack number.

BIN

Bin number.

USERID

User ID that initiated the change. A user ID that starts with an asterisk (*) indicates that a DFSMSrmm function initiated the change.

DATE

Date the control data set changed.

TIME

Time the control data set changed.

SYSTEM

The SMF system identifier.

STATUS

One of:

CLOSED

For a stacked volume, DFSMSrmm lists the stacked volume in the report because the stacked volume was closed by command processing or export processing.

EMPTY

Rack or bin number has no volume assigned. For a stacked volume, the stacked volume contains no volumes.

IN USE

Rack or bin number contains non-scratch volume.

MASTER

Volume is master status.

OPEN

Data set on the volume is open. For a stacked volume, the stacked volume contains at least one volume.

SCRATCH

Volume is scratch or shelf location contains scratch volume.

USER

Volume is a user volume.

VITAL

Volume is retained by a vital record specification. For a stacked volume, the stacked volume contains volumes that are retained by vital record specifications.

LOCATION

Location where the volume is stored. When a volume is in the process of being moved, DFSMSrmm marks the location field in the audit report with the '<' character.

LOAN LOC

Location outside the library where the volume is on loan.

OWNER

Volume owner.

EXP DATE

Volume expiration date.

SECURITY

Highest security classification in effect when the volume was accessed.

ACTIVITY

Can be: CREATE, DELETE, or UPDATE.

Figure 79 shows excerpts from an audit trail report. The first column heading identifies the type of report information that is contained in the report.

REMOVABLE MEDIA MANAGER													AUDIT TRAIL REPORT		PAGE	1
5647-A01 (C) Copyright IBM Corporation 2000													DATE		2001/01/01	
VOLUME	RACK	BIN	USERID	DATE	TIME	SYSTEM	STATUS	LOCATION	LOAN	LOC	OWNER	EXP DATE	SECURITY	ACTIVITY		
111000	111000	000033	DENZEL	16/11/1999	04:00:10	E4E4	MASTER	<REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111041	111041	000042	BJK	16/11/1999	04:00:03	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111054	111054	000043	PALMER	16/11/1999	04:00:14	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111056	111056	000044	WRIGHT	16/11/1999	04:00:10	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111089	111089	000048	GILLPAT	16/11/1999	04:00:08	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111113	111113	000121	WHEELER	16/11/1999	04:00:12	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111122	111122	000122	PENDLTN	16/11/1999	04:00:12	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111124	111124	000123	ZOUNEK	16/11/1999	04:00:15	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111127	111127	000124	TAUBER	16/11/1999	04:00:14	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		
111128	111128	000125	RDRHSME	16/11/1999	04:00:07	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE		

Figure 79. Audit Trail Report (Part 1 of 3)

REMOVABLE MEDIA MANAGER													AUDIT TRAIL REPORT		PAGE	2
5647-A01 (C) Copyright IBM Corporation 2000													DATE		2001/01/01	
RACK/BIN	VOLUME	USERID	DATE	TIME	SYSTEM	STATUS	LOCATION	LOAN	LOC	OWNER	EXP DATE	SECURITY	ACTIVITY			
000033	111000	WEISSEN	16/11/1999	04:00:10	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000042	111041	WEISSEN	16/11/1999	04:00:03	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000043	111054	GILLES	16/11/1999	04:00:14	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000044	111056	GILLES	16/11/1999	04:00:10	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000122	111122	KIRCHHOF	16/11/1999	04:00:12	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000123	111124	KIRCHHOF	16/11/1999	04:00:15	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000124	111127	SMAX	16/11/1999	04:00:14	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
000125	111128	SMAX	16/11/1999	04:00:07	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			
111041	111041	MOREY	16/11/1999	04:00:03	E4E4	MASTER	REMOTE			RDRHSME	07/11/1999	U	UPDATE			

Figure 79. Audit Trail Report (Part 2 of 3)

REMOVABLE MEDIA MANAGER													AUDIT TRAIL REPORT		PAGE	3
5647-A01 (C) Copyright IBM Corporation 2000													DATE		2001/01/01	
USERID	VOLUME	RACK	BIN	DATE	TIME	SYSTEM	STATUS	LOCATION	LOAN	LOC	OWNER	EXP DATE	SECURITY	ACTIVITY		
*HKP	111044	111044		16/11/1999	01:01:05	E4E4	SCRCH	SHELF					U	UPDATE		
*HKP	111044	111044		16/11/1999	01:01:05	E4E4	IN USE	SHELF					U	DELETE		
*HKP	111044	111044		16/11/1999	01:01:05	E4E4	SCRCH	SHELF					U	CREATE		
*HKP	111206	111206		16/11/1999	01:01:07	E4E4	SCRCH	SHELF					U	UPDATE		
*HKP	111627	111627		16/11/1999	01:01:07	E4E4	MASTER	SHELF			KOEPPEL	28/07/1999	U	UPDATE		
*HKP	111206	111206		16/11/1999	01:01:07	E4E4	IN USE	SHELF			WALDO	28/07/1999	U	DELETE		
*HKP	111206	111206		16/11/1999	01:01:07	E4E4	SCRCH	SHELF			WALDO	28/07/1999	U	CREATE		
*HKP	111280	111280		16/11/1999	01:01:09	E4E4	SCRCH	SHELF					U	UPDATE		
*HKP	111282	111282		16/11/1999	01:01:09	E4E4	MASTER	SHELF			RDROPCA	07/10/1999	U	UPDATE		
*HKP	111280	111280		16/11/1999	01:01:09	E4E4	IN USE	SHELF			RDROPCA	07/10/1999	U	DELETE		
*HKP	111280	111280		16/11/1999	01:01:09	E4E4	SCRCH	SHELF			RDROPCA	07/10/1999	U	CREATE		
*HKP	111282	111282		16/11/1999	01:01:11	E4E4	SCRCH	SHELF					U	UPDATE		

Figure 79. Audit Trail Report (Part 3 of 3)

Return Codes for EDGAUD

EDGAUD issues one of the return codes that are shown in Table 8.

Table 8. EDGAUD Return Codes

Return Code	Explanation
0	All requested functions completed successfully.
4	DFSMSrmm encountered a minor error during processing. It issues a warning message and continues processing.
12	DFSMSrmm encountered a severe error during processing of one of the requested functions. DFSMSrmm stops the utility.
16	DFSMSrmm encountered a severe error during a required communication with the DFSMSrmm subsystem. DFSMSrmm stops the utility.

Chapter 5. Creating Reports Using DFSMSrmm-Supplied EXECs

DFSMSrmm provides restructured extended executor (REXX) EXECs and JCL that you can use to create the reports that are described in Table 9. You can copy these EXECs and use them to create reports that are tailored for your installation, as described in “Tailoring the DFSMSrmm-Supplied EXECs to Create Your Own Reports” on page 84.

You can use the sample EDGJRPT JCL, which is provided in SAMPLIB, to invoke the EDGRRPTE REXX EXEC to create the reports. See Appendix C, “List of DFSMSrmm Samples”, on page 277 for other samples that are provided in SAMPLIB. The input to the reporting EXEC is the extended extract data set. The extract data set contains an extended extract record concatenating volume and data set information. The data set record information starts at byte 800 in the EDGRXEXT mapping macro. For stacked volumes, DFSMSrmm merges the stacked volume location information into the location information for all volumes that are contained in the stacked volume.

Use the sample EDGJRPT JCL with the EDGRRPTE REXX EXEC to produce the reports that are shown in Table 9.

Table 9. DFSMSrmm Reports

Report Name	Description
REPORT01	Pull list for scratch tapes by volume serial number
REPORT02	Pull list for scratch tapes sorted by data set name
REPORT03	Inventory list by volume serial number
REPORT04	Inventory list by data set name
REPORT05	Inventory of data sets including number of kilobytes (KB) used
REPORT06	Inventory of volume serial number by location
REPORT07	Inventory of data set names by location
REPORT08	Inventory of bin numbers by location
REPORT09	List of data set names at loan locations
REPORT10	List of volume serial numbers at loan locations
REPORT11	List of multivolume data sets
REPORT12	Movement report including the first data set name on the volume
REPORT13	Movement report by storage location bin number
REPORT14	Movement report by volume serial number
REPORT15	Inventory list sorted by volume serial number including volume count
REPORT16	List of duplicate volume serial numbers including volume count

Creating Reports

Create an extended extract data set during DFSMSrmm inventory management. Then use the EDGRRPTE EXEC to create the DFSMSrmm-supplied reports. See “Tailoring the DFSMSrmm-Supplied EXECs to Create Your Own Reports” on page 84 for further information.

To create reports, follow this procedure:

1. Make a copy of the sample EDGJRPT JCL that is in SAMPLIB. Use the DFSMSrmm extended extract data set as input to EDGJRPT to create the reports.
2. Create a DFSMSrmm extended extract data set by using the DFSMSrmm EDGHSKP utility with XREPTEXT DD statement.
3. Make sure that all the messages that the DFSMSrmm subsystem issues during inventory management are copied to your job log. Refer to the step named STEP02 in the sample EDGJRPT JCL.
4. Produce the extended reports. Remove the //REPORT nn DD statements for each report that you do not want to run. Refer to the step named EXTRPDT in the sample EDGJRPT JCL.

Tailoring the EDGJRPT Sample JCL

Before you can use the JCL, you must customize the sample EDGJRPT JCL for your environment. Follow this procedure:

1. Modify the PAGEDEF and FORMDEF definitions in the OUTDDQ DD statement in step EXTRPDT.
 - a. Specify a valid font for your printer.
 - b. Define a printer address and a node to print your reports.
2. Change the data set name of the MESSAGE DD statements to your own data set name of the MESSAGE file.
3. Replace RMM.EXTRACT.FILE in the EDGJRPT JCL with the name of your extended extract data set. You must make this change wherever the RMM.EXTRACT.FILE file report name is specified.
4. Change the SPACE and UNIT parameter for the SORTOUT and SYSIN statement. Calculate the DASD space requirements by multiplying the number of data set records by 1400 bytes for each record.
5. Replace the "054" value, if you need to use a value other than 54. The lines per page are defined as a parameter to the EDGRRPTE REXX procedure.
6. Select your reports by using the REPORT nn DD names that are defined in the EDGJRPT JCL. Figure 80 on page 83 shows a part of the sample JCL and how to pass parameters to the EDGRRPTE procedure. The example that is shown in Figure 80 on page 83 selects all reports except REPORT06 and REPORT07, which are commented out.

```

//REPORT01 DD  SYSOUT=*,RECFM=VBA
//REPORT02 DD  SYSOUT=*,RECFM=VBA
//REPORT03 DD  SYSOUT=*,RECFM=VBA
//REPORT04 DD  SYSOUT=*,RECFM=VBA
//REPORT05 DD  SYSOUT=*,RECFM=VBA
//*EPORT06 DD  SYSOUT=*,RECFM=VBA
//*EPORT07 DD  SYSOUT=*,RECFM=VBA
//REPORT08 DD  SYSOUT=*,RECFM=VBA
//REPORT09 DD  SYSOUT=*,RECFM=VBA
//REPORT10 DD  SYSOUT=*,RECFM=VBA
//REPORT11 DD  SYSOUT=*,RECFM=VBA
//REPORT12 DD  SYSOUT=*,RECFM=VBA
//REPORT13 DD  SYSOUT=*,RECFM=VBA
//REPORT14 DD  SYSOUT=*,RECFM=VBA
//REPORT15 DD  SYSOUT=*,RECFM=VBA
//REPORT16 DD  SYSOUT=*,RECFM=VBA
//SYSTSIN DD  *
EX 'SYS1.SEDGEXE1(EDGRRPTE)' -
    '054 INTERNAL USE ONLY'

```

Figure 80. Report Selection

- Figure 81 shows how to replace the default security heading text. The security heading text can be up to 30 characters. The text can contain blanks or special characters and is written on each page. Use the continuation character "+" to suppress all the leading blanks in the new line.

```

EX 'SYS1.SEDGEXE1(EDGRRPTE)' -
    '054 Internal use only'
    ##### ----- security heading text - up to 30 chars

```

Figure 81. Creating a Report Security Header

- Optionally add the CCARD DD to overwrite the internal SORT statements, the security header, or the lines per page. Figure 82 shows an example of specifying the CCARD DD statements. Valid parameters that can be specified are:
 - REPORT nn ($nn = 01$ to 15) for the SORT statements
 - HEAD for the security header
 - LINES for the lines per page
 - /* for the end of the records

```

//CCARD DD *
SORT06 SORT FIELDS=(156,8,CH,A,9,6,CH,D,915,4,CH,A)
SORT06 INCLUDE COND=(5,1,CH,EQ,C'X',
SORT06 AND,(583,1,CH,EQ,C'S',
SORT06 OR,583,1,CH,EQ,C'U'))
SORT06 OPTION VLSHRT
LINES 20
HEAD INTERNAL USE
/*

```

Figure 82. Defining a CCARD DD Statement

Tailoring the DFSMSrmm-Supplied EXECs to Create Your Own Reports

When used as is, the DFSMSrmm-supplied report REPORT01 produces a pull list for scratch volumes that are sorted by volume serial number. Follow these steps to tailor the report REPORT01 to provide information about volumes with temporary write errors instead of a pull list for scratch tapes:

1. Make a copy of the EDGRRPTE REXX EXEC to avoid losing any modifications that you make to the DFSMSrmm-supplied reports, because you will lose your changes when DFSMSrmm replaces them. The EDGRRPTE EXEC shipped with DFSMSrmm uses the DFSORT VLSHRT option. You might need to modify the EXEC if you do not have DFSORT installed.
2. To change the sort order and criteria, change the SORT FIELDS and INCLUDE statement for the REPORT01 in the EDGRRPTE REXX EXEC. To find the sort statement for the REPORT01, do a search for SORT01. You can find the fields for the SORT FIELD and the INCLUDE statement by looking at the mapping of the extended extract record EDGRXEXT.

Figure 83 shows the DFSMSrmm-supplied EDGRRPTE REXX EXEC, where REPORT01 is sorted by volume serial number and volume status.

```
sort01.1 = ' SORT FIELDS=(9,6,CH,A)                '
sort01.1 = left(sort01.1,80)
sort01.2 = ' INCLUDE COND=(5,1,CH,EQ,C'X',        '
sort01.2 = left(sort01.2,80)
sort01.3 = '           AND,322,8,CH,EQ,C'SCRATCH ', '
sort01.3 = left(sort01.3,80)
sort01.4 = '           AND,915,4,CH,LT,C' 2')      '
sort01.4 = left(sort01.4,80)
sort01.5 = ' OPTION VLSHRT                          '
sort01.5 = left(sort01.5,80)
s01 = 5
```

Figure 83. Sorting by Volume Serial Number and Volume Status

Figure 84 shows 370 in the SORT FIELD. This is the offset in the EDGRXEXT mapping macro for the temporary write errors, plus the value 4 for the record length field.

```
sort01.1 = ' SORT FIELDS=(370,4,CH,A)              '
sort01.1 = left(sort01.1,80)
sort01.2 = ' INCLUDE COND=(5,1,CH,EQ,C'X',        '
sort01.2 = left(sort01.2,80)
sort01.3 = '           AND,322,8,CH,EQ,C'SCRATCH ', '
sort01.3 = left(sort01.3,80)
sort01.4 = '           AND,915,4,CH,LT,C' 2',      '
sort01.4 = left(sort01.4,80)
sort01.5 = '           AND,375,4,CH,GT,C' 0')      '
sort01.5 = left(sort01.5,80)
sort01.6 = ' OPTION VLSHRT                          '
sort01.6 = left(sort01.6,80)
s01 = 6
```

Figure 84. Sorting by Volume Serial Number, Volume Status, and Temporary Errors, Excluding Volumes without Errors

3. To change the report header, modify the DFSMSrmm-supplied EDGRRPTE REXX EXEC, as shown in Figure 85 on page 85.

```
t2.1 = center('Scratch Tapes by Volume Serial Number',69)
t0.2 = left('EDGRPT01',8)
```

Figure 85. REPORT01 Report Header

Figure 86 shows the change to create a new report header named Volumes with Temporary Errors.

```
t2.1 = center('Volumes with Temporary Errors',69)
t0.2 = left('EDGRPT01',8)
```

Figure 86. REPORT01 Report Header Modified

- To change the titles on the columns, modify the DFSMSrmm-supplied EDGRRPTE REXX EXEC. *out.cs = asa.h* is the title line for the report columns. You can find the definition for the title variables in the sample EDGRRPTE EXEC starting at the label *const*. Figure 87 shows the report column headings as they are defined in the sample EDGRRPTE REXX EXEC.

```
do h = 1 to 3
  cs = cs + 1
  out.cs = asa.h tvolser.h tdsname.h tvolseq.h tdsnseq.h,
           tcrdate.h texpdto.h,
           tflag.h tltyp.h,
           tmedty.h tmedrec.h,
           thome.h tstore.h tloc.h,
           terror.h
end
```

Figure 87. REPORT01 Column Headings

Figure 88 shows the variable *ttwrte.1*, which is the column heading for temporary errors.

```
do h = 1 to 3
  cs = cs + 1
  out.cs = asa.h tvolser.h tdsname.h tcrdate.h ttwrte.h,
           texpdto.h,
           tflag.h tltyp.h,
           tmedty.h tmedrec.h,
           thome.h tstore.h tloc.h,
           terror.h
end
```

Figure 88. REPORT01 Column Headings Modified

- To obtain the correct output, modify the DFSMSrmm-supplied EDGRRPTE REXX EXEC by specifying the appropriate output variable. You can find the definition for these variables in the sample EDGRRPTE REXX EXEC, starting at the label *lclxmap*. *out.cs = asa.2* is the output value that is returned in the report. Figure 89 on page 86 shows the JCL from the sample EDGRRPTE REXX EXEC.

```
.out.cs = asa.2 xvvolser xddsname xvvolseq xddsseq,
          xvcrdate xvexpdto,
          lclflag xvlabel,
          xvmedty xvmedrec,
          xvhloc xvloctyp lclloc lclerror
```

Figure 89. REPORT01 Returned Values

Figure 90 shows the addition of the *rvtwerr* variable to obtain the temporary write error information.

```
out.cs = asa.2 xvvolser xddsname xvcrdate xvtwerr,
          xvexpdto,
          lclflag xvlabel,
          xvmedty xvmedrec,
          xvhloc xvloctyp lclloc,
          lclerror
```

Figure 90. REPORT01 Returned Values Modified

6. Submit the job.

Using DFSMSrmm-Supplied Reports

This section provides details about the reports that you can create using the DFSMSrmm-supplied EXECs and JCL.

REPORT01: Pull List for SCRATCH Tapes Sorted by Volume Serial Number

REPORT01, as shown in Figure 91 on page 88, includes volumes in SCRATCH status and only the first file on the volume. REPORT01 is sorted by volume serial number.

The data columns for REPORT01 are:

Volume Serial

The volume serial number.

Data Set Name

The name of the data set.

Vol-Seq.

The sequence number of the volume.

DSN-Seq.

The data set sequence number or the physical file sequence number on tape if the data set sequence number is blank or zero.

Create Date

The date when the data set was first written to tape.

Org. Exp. Date

The original volume expiration date written by O/C/EOV.

VF

The volume flag which can be one of the following:

Blank

Normal.

- O** The volume has been opened for a write operation and has not yet been closed. O might indicate that a write operation is still in progress or that a file has been left open by a system error. You can still open the volume for output but the data might be corrupted.
- A** The data set was closed by abend processing.

LBL Typ

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Media Type

The physical media type of the volume.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

Home Location

The place where a volume is returned.

SS

The location type which can be one of the following:

Blank

The volume is in location SHELF.

A The volume is in an automatic system-managed library.

M The volume is in a manual system-managed library.

S The volume is in a storage location.

Location Name

The storage location, loan location, or blank if the volume resides in its home location.

Sum. Error

The total number of temporary and permanent read errors and write errors for the volume.

Volume Serial	Data Set Name	Vol-Seq.	DSN-Seq.	Create Date	Org. Exp. Date	V F	LBL Typ	Media Type	Rec. Fmt	Home Location	S Location	Sum. Error
A00031		1		12/05/1999			SL	*	*	SHELF		0
A00032		1		12/05/1999			SL	*	*	SHELF		0
A00033		1		12/05/1999			SL	*	*	SHELF		0
A00034		1		12/05/1999			SL	*	*	SHELF		0
A00035		1		12/05/1999			SL	*	*	SHELF		0
A00036		1		12/05/1999			SL	*	*	SHELF		0
A00037		1		12/05/1999			SL	*	*	SHELF		0
A00038		1		12/05/1999			SL	*	*	SHELF		0
A00039		1		12/05/1999			SL	*	*	SHELF		0
A00040		1		12/05/1999			SL	*	*	SHELF		0
A00101		1		12/05/1999			SL	*	*	SHELF		0

End of Report. 11 Entries listed

Figure 91. Sample REPORT01 Output: Pull List for SCRATCH Tapes Sorted by Volume Serial Number

REPORT02: Pull List for SCRATCH Tapes Sorted by Data Set Name

REPORT02, as shown in Figure 92 on page 89, includes volumes in SCRATCH status and only the first file on the volume. REPORT02 is sorted by data set name and volume serial number.

The data columns for REPORT02 are:

Volume Serial

The volume serial number.

Data Set Name

The name of the data set.

Vol-Seq.

The sequence number of the volume.

DSN-Seq.

The data set sequence number or the physical file sequence number on tape if the data set sequence number is blank or zero.

Create Date

The date when the data set was first written to tape.

Org. Exp. Date

The original volume expiration date written by O/C/EOV.

VF

The volume flag which can be one of the following:

Blank

Normal.

O The volume has been opened for a write operation and has not yet been closed. O might indicate that a write operation is still in progress or that a file has been left open by a system error. You can still open the volume for output but the data might be corrupted.

A The data set was closed by abend processing.

LBL Typ

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL
Specifies an ANSI label.

NL
Specifies no label.

SUL
Specifies an IBM standard label with user labels.

AUL
Specifies an ANSI label with user labels.

Media Type
The physical media type of the volume.

Rec. Fmt
The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

Home Location
The place where a volume is returned.

SS
The location type which can be one of the following:

Blank
The volume is in location SHELF.

A The volume is in an automatic system-managed library.

M The volume is in a manual system-managed library.

S The volume is in a storage location.

Location Name
The storage location, loan location, or blank if the volume resides in its home location.

Sum. Error
The total number of temporary and permanent read errors and write errors for the volume.

Volume		Vol-Seq.	DSN-Seq.	Create Date	Org. Date	Exp. Date	V F	LBL Typ	Media Type	Rec. Fmt	Home Location	S Name	Location Sum.	Error
A00031		1		12/05/1999				SL	*	*	SHELF		0	
A00032		1		12/05/1999				SL	*	*	SHELF		0	
A00033		1		12/05/1999				SL	*	*	SHELF		0	
A00034		1		12/05/1999				SL	*	*	SHELF		0	
A00035		1		12/05/1999				SL	*	*	SHELF		0	
A00036		1		12/05/1999				SL	*	*	SHELF		0	
A00037		1		12/05/1999				SL	*	*	SHELF		0	
A00038		1		12/05/1999				SL	*	*	SHELF		0	
A00039		1		12/05/1999				SL	*	*	SHELF		0	
A00040		1		12/05/1999				SL	*	*	SHELF		0	
A00101		1		12/05/1999				SL	*	*	SHELF		0	

End of Report. 11 Entries listed

Figure 92. Sample REPORT02 Output: Pull List for SCRATCH Tapes Sorted by Data Set Name.

REPORT03: Inventory List by Volume Serial Number

REPORT03, as shown in Figure 93 on page 91, includes all data sets. REPORT03 is sorted by volume serial number and data set sequence number.

The data columns for REPORT03 are:

Volume Serial

The volume serial number.

Data Set Name

The data set name of the first file on the volume.

Vol-Seq.

The sequence number of the volume.

DSN-Seq.

The data set sequence number or, if the data set sequence number is blank or zero, the relative position of the data set on the volume.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating job field is blank.

Create Date

The date when the data set was created.

Create Time

The time when the data set was first written to tape.

Expiration Date

The date the volume should be considered for release.

Volume Ref. Date

Displays the date when the data set was last accessed for read processing or write processing.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

VR

The vital record status which can be one of the following:

Y The volume is retained as a vital record.

N The volume is not retained as a vital record.

Location Name

The storage location, loan location, or blank if the volume resides in its home location.

```
DFSMSrmm Security heading text Inventory List by Volume Serial Number PAGE - 1
EDGRPT03 DATE - 2000/341
TIME - 22:38:55
```

Volume Serial	Data Set Name	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Volume Ref. Date	LBL	Rec. Fmt	V S	V R	Location Name
SC0000	HMIG.HMIGTAPE.DATASET	1	1		1999/209	080425		1999/212	SL	*	S	N	
SC0001	SIEGEL.USERTEST.FALSCH	1	1		1999/185	153551		1999/185	SL	*	S	N	
SC0002	HBAC.DMP.BUILD.VBSY179.D99086.T271823	1	1	DFHSM11	1999/086	231912	1999/365	1999/086	SL	36TR	M	N	
SC0003	HBAC.DMP.TSO.VJET004.D95208.T475422	3	1		1999/209	062937		1999/209	SL	*	S	N	
SC0004	SMPMCS	1	1	STACKER	1993/279	131329	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F1	1	2	STACKER	1993/279	131342	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F2	1	3	STACKER	1993/279	131350	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F3	1	4	STACKER	1993/279	131410	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F4	1	5	STACKER	1993/279	131426	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F5	1	6	STACKER	1993/279	131438	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F6	1	7	STACKER	1993/279	131447	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F7	1	8	STACKER	1993/279	131455	1999/365	1993/279	SL	36TR	U	N	
SC0004	JMY8M10.F8	1	9	STACKER	1993/279	131507	1999/365	1993/279	SL	36TR	U	N	
SC0005	SCHLUM.RMMDEMO.FILE2.VOL12	2	1		1999/200	143036		1999/200	SL	*	S	N	
SC0005	SCHLUM.RMMDEMO.FILE3.VOL2	2	2		1999/200	143046		1999/200	SL	*	S	N	
SC0005	SCHLUM.RMMDEMO.FILE4.VOL23	2	3		1999/200	143533		1999/200	SL	*	S	N	
SC0006	SSCMVS.P9202.ESAS.EPD.DUMP	1	1	EPDRES3	1993/207	101728	1999/016	1993/209	SL	36TR	U	N	
SC0007	HBAC.DMP.TSO.VEPD001.D95208.T195822	4	1		1999/209	062947		1999/209	SL	*	S	N	

End of Report. 18 Entries listed

Figure 93. Sample REPORT03 Output: Inventory List by Volume Serial Number

REPORT04: Inventory List by Data Set Name

REPORT04, as shown in Figure 94 on page 93, includes data sets and excludes all volumes without any data set information. REPORT04 is sorted by data set name, create date, and create time.

The data columns for REPORT04 are:

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or if the data set sequence number is blank or zero the relative position of the data set on the volume.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Volume Ref. Date

Displays the date when the data set was last accessed for read or write processing.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

VR

The vital record status which can be one of the following:

Y The volume is retained as a vital record.

N The volume is not retained as a vital record.

Location Name

The storage location, loan location, or blank if the volume resides in its home location.

Data Set Name	Volume Serial	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Volume Ref. Date	Rec. LBL	V Fmt	V S	V R	Location Name
ADDONS.CNTL	SC0019	1	3		1992/240	143829		1995/191	SL *	S	N		
ADDONS.CNTL	SC0464	1	8		1992/240	084232		1995/254	SL *	S	N		
ADDONS.CNTL	SC0473	1	8		1992/240	104530		1995/257	SL *	S	N		
ADDONS.EXEC	SC0019	1	4		1992/240	143834		1995/191	SL *	S	N		
ADDONS.EXECFB	SC0464	1	4		1992/240	084205		1995/254	SL *	S	N		
ADDONS.INITVARS	SC0019	1	10		1992/240	143906		1995/191	SL *	S	N		
ADDONS.INITVARS	SC0464	1	6		1992/240	084223		1995/254	SL *	S	N		
ADDONS.MSGS	SC0019	1	9		1992/240	143902		1995/191	SL *	S	N		
ADDONS.OBJ	SC0464	1	10		1992/240	084248		1995/254	SL *	S	N		
ADDONS.OBJ	SC0473	1	10		1992/240	104544		1995/257	SL *	S	N		
ADDONS.PANELS	SC0019	1	7		1992/240	143851		1995/191	SL *	S	N		
ADDONS.SKELS	SC0019	1	8		1992/240	143858		1995/191	SL *	S	N		
HBAC.DMP.BUILD.VBSY153.D95086.T455822	SC0030	1	1	DFHSM11	1992/240	225922	1999/365	1995/086	SL	36TR	M	N	
HBAC.DMP.BUILD.VBSY16A.D95086.T530423	SC0037	1	1	DFHSM11	1992/240	230551	1999/365	1995/086	SL	36TR	M	N	
HBAC.DMP.BUILD.VBSY162.D95086.T150823	SC0033	1	1	DFHSM11	1992/240	230920	1999/365	1995/086	SL	36TR	M	N	
HBAC.DMP.BUILD.VBSY166.D95086.T370823	SC0010	1	1	DFHSM11	1992/240	230921	1999/365	1995/086	SL	36TR	M	N	
HBAC.DMP.BUILD.VBSY172.D95086.T471523	SC0035	1	1	DFHSM11	1992/240	231806	1999/365	1995/086	SL	36TR	M	N	
HBAC.DMP.BUILD.VBSY175.D95086.T461723	SC0036	1	1	DFHSM11	1992/240	231811	1999/365	1995/086	SL	36TR	M	N	

End of Report. 18 Entries listed

Figure 94. Sample REPORT04 Output: Inventory List by Data Set Name

REPORT05: Inventory of Data Sets Including Used Kilobytes

REPORT05, as shown in Figure 95 on page 95, includes data sets and excludes all volumes without any data set information. REPORT05 is sorted by data set name, create date, and create time.

The data columns for REPORT05 are:

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or if the data set sequence number is blank or zero the relative position of the data set on the volume.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Volume Ref. Date

Displays the date when the data set was last accessed for read processing or write processing.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

Kilobytes used

The number of used kilobytes for the data set calculated by BLOCKSIZE multiplied with BLOCKCOUNT. If the block-size in the data-set record equals zero, a block-size of 64 KB is assumed. This is valid, because the default block size for DFMSHsm and DFMSDss output records written to tape is 65 520 bytes (64 KB).

The calculated value is an approximation of the amount of data written by the application. It does not reflect any system or hardware compression that may reduce the size stored on the volume.

Data Set Name	Volume Serial	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Volume Ref. Date	Rec. LBL	V Fmt	Kilobytes S used
BSYDFP.ABARS.OUTPUT.D.G0001V00	SC0698	1	1	DFHSMABR	1992/163	150444	1999/365	1994/196	SL 18TR	M	2047
BSYDFP.ABARS.OUTPUT.D.G0001V00	SC0109	1	1	DFHSMABR	1992/267	124621	1999/365	1994/193	SL 18TR	M	5822
BSYDFP.ABARS.OUTPUT.I.G0001V00	SC0628	1	2	DFHSMABR	1992/163	150550	1999/365	1994/194	SL 18TR	M	223
BSYDFP.ABARS.OUTPUT.I.G0001V00	SC1027	1	2	DFHSMABR	1992/267	124700	1999/365	1994/195	SL 18TR	M	223
BSYDFP.ABARS.OUTPUT.O.G0001V00	SC0698	1	2	DFHSMABR	1992/163	150508	1999/365	1994/196	SL 18TR	M	2975
BSYDFP.ABARS.OUTPUT.O.G0001V00	SC0109	1	2	DFHSMABR	1992/267	124629	1999/365	1994/193	SL 18TR	M	1119
BSYDFP.ABARS.TEST.C.C01V0001	SC0343	1	1	DFHSMABR	1994/263	140941	1999/365	1994/263	SL 36TR	M	1375
BSYDFP.ABARS.TEST.D.C01V0001	SC0346	1	1	DFHSMABR	1994/263	140811	1999/365	1994/263	SL 36TR	M	3679
BSYDFP.ABARS.TEST.I.C01V0001	SC0372	1	1	DFHSMABR	1994/263	140846	1999/365	1994/263	SL 36TR	M	383
HBAC.DMP.BUILD.VBLD026.D95268.T221922	SC0899	2	1	DFHSMZB	1995/268	223102	1999/365	1995/268	SL 36TR	M	151488
HBAC.DMP.BUILD.VBLD026.D95275.T331722	SC1628	1	1	DFHSMZB	1995/275	221804	1999/365	1995/275	SL 36TR	M	621376
HBAC.DMP.BUILD.VBLD026.D95275.T331722	SC1636	2	1	DFHSMZB	1995/275	222913	1999/365	1995/275	SL 36TR	M	179200
HBAC.DMP.BUILD.VBLD027.D95219.T354422	SC2043	1	1		1995/219	224512		1995/219	SL *	S	620288
HBAC.DMP.BUILD.VBLD027.D95247.T242722	SC2197	1	1		1995/247	222756		1995/247	SL *	S	622400

End of Report. 14 Entries listed

Figure 95. Sample REPORT05 Output: Inventory of Data Sets Including Used Kilobytes

REPORT06: Inventory of Volume Serial Numbers by Location

REPORT06, as shown in Figure 96 on page 96, includes all volumes residing in one of the three built-in storage locations or installation-defined storage locations. REPORT06 is sorted by storage location and volume serial number and data set sequence number.

The data columns for REPORT06 are:

Volume Serial

The serial number of the volume where the specified data set resides.

Data Set Name

The data set name of the first file on the volume.

BIN number

The assigned specific bin number. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The Data Set sequence number or, if the data set sequence number is blank or zero, the relative position of the data set on the volume.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Date stored

The date the volume was last moved from or to a new storage location.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

DFSMSrmm Security heading text		Inventory of Volumes in Storage Location DISTANT							PAGE -	1	
EDGRPT06									DATE -	2000/341	
									TIME -	22:38:55	
Volume	BIN	Creating	Vol-	DSN-	Create	Create	Expiration	Date	Rec.	V	
Serial Data Set Name	Number	Jobname	Seq.	Seq.	Date	Time	Date	stored	LBL	Fmt S	
SC0502	SSC.VITALREC.BUILD.ESA51.G0053V00	VRESA51	1	1	1992/240	215435	1995/295	1995/277	SL	36TR M	
SC0513	SSC.VITALREC.BUILD.ESA51.G0053V00	VRESA51	2	1	1992/240	220945	1995/295	1995/277	SL	36TR M	
SC0514	SSC.VITALREC.BUILD.EAS.G0053V00	VRESAS	2	1	1992/240	212810	1995/295	1995/277	SL	36TR M	
SC0515	SSC.VITALREC.BUILD.EAS.G0053V00	VRESAS	1	1	1992/240	211341	1995/295	1995/277	SL	36TR M	
SC0517	SSC.VITALREC.BUILD.MVSSMP.G0053V00	VRMVSSMP	2	1	1992/240	230650	1995/295	1995/277	SL	36TR M	
SC0518	SSC.VITALREC.BUILD.NET.G0053V00	VRNET	3	1	1992/240	094046	1995/295	1995/277	SL	36TR M	
SC0521	SSC.VITALREC.BUILD.ESA51.G0053V00	VRESA51	3	1	1992/240	222620	1995/295	1995/277	SL	36TR M	
SC0522	SSC.VITALREC.BUILD.MVSSMP.G0053V00	VRMVSSMP	1	1	1992/240	224356	1995/295	1995/277	SL	36TR M	
SC0523	SSC.VITALREC.BUILD.EAS.G0053V00	VRESAS	3	1	1992/240	214454	1995/295	1995/277	SL	36TR M	
SC0524	SSC.VITALREC.BUILD.NET.G0053V00	VRNET	1	1	1992/240	090405	1995/295	1995/277	SL	36TR M	
End of Report. 10 Entries listed											
DFSMSrmm Security heading text		Inventory of Volumes in Storage Location REMOTE							PAGE -	3	
EDGRPT06									DATE -	2000/341	
									TIME -	22:38:55	
Volume	BIN	Creating	Vol-	DSN-	Create	Create	Expiration	Date	Rec.	V	
Serial Data Set Name	Number	Jobname	Seq.	Seq.	Date	Time	Date	stored	LBL	Fmt S	
SC1195	SCHLUM.RMMDEMO.MMOVE.VOL1	RMMTEST1	1	1	1992/265	093450	1995/059	1995/059	SL	18TR M	
SC1196	SCHLUM.RMMDEMO.MMOVE.VOL4	RMMTEST4	1	1	1992/265	093439	1995/059	1995/059	SL	18TR M	
68059C	SCHLUM.TMS.DATA	000002	1	1	1995/086	153951	1995/100	1995/142	SL	18TR U	
68059C	SCHLUM.TMS.DATA	000002	1	1	1995/086	153951	1995/100	1995/142	SL	18TR U	
End of Report. 4 Entries listed											

Figure 96. Sample REPORT06 Output: Inventory of Volume Serial Number by Location

REPORT07: Inventory of Data Set Names by Location

REPORT07, as shown in Figure 97 on page 98, includes all volumes residing in one of the DFSMSrmm built-in storage locations or installation-defined storage locations. REPORT07 is sorted by storage location, data set name, create date, and create time.

The data columns for REPORT07 are:

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

BIN number

The assigned specific bin number. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Date stored

The date the volume was last moved from or to a new storage location.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

```
DFSMsrm Security heading text          Inventory of Data Set Names in Storage Location DISTANT          PAGE -          1
EDGRPT07                               DATE -        2000/341
                                         TIME -        22:38:55

Data Set Name                          Volume BIN  Vol- DSN-  Creating Create   Create Expiration Date   Rec. V
-----  Serial Number  Seq. Seq.  Jobname Date     Time  Date      stored  LBL Fmt S
-----  -----  ---  ---  -----  ---  ---  ---  -----  ---  ---
SSC.VITALREC.BUILD.DB.G0055V00        SC2389      1    1 VRDB   1993/279  190825 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00        SC2388      2    1 VRDB   1993/279  192928 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00        SC2397      3    1 VRDB   1993/279  194622 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00        SC2034      4    1 VRDB   1993/158  200505 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00        SC2019      5    1 VRDB   1993/158  202356 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00        SC2001      1    1 VRESA  1993/158  203557 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00        SC2000      2    1 VRESA  1993/158  205047 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00        SC2011      3    1 VRESA  1993/158  210806 1995/295  1995/277  SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0053V00      SC0515      1    1 VRESAS 1992/240  211341 1995/295  1995/277  SL 36TR M
                                         End of Report.    9 Entries listed
```

```
DFSMsrm Security heading text          Inventory of Data Set Names in Storage Location REMOTE          PAGE -          3
EDGRPT07                               DATE -        2000/341
                                         TIME -        22:38:55

Data Set Name                          Volume BIN  Vol- DSN-  Creating Create   Create Expiration Date   Rec. V
-----  Serial Number  Seq. Seq.  Jobname Date     Time  Date      stored  LBL Fmt S
-----  -----  ---  ---  -----  ---  ---  ---  -----  ---  ---
SCHLU.RMM.CDS                          68059C 000001  1    1      1995/085  183342 1995/099  1995/142  SL 18TR U
SCHLU.RMM.CDS                          68059D 000002  1    1      1995/086  153951 1995/100  1995/142  SL 18TR U
SCHLUM.RMMDEMO.MMOVE.VOL1              SC1195 000050  1    1 RMMTEST1 1992/265  093450 1995/059  1995/059  SL 18TR M
SCHLUM.RMMDEMO.MMOVE.VOL4              SC1196 000055  1    1 RMMTEST4 1992/265  093439 1995/059  1995/059  SL 18TR M
                                         End of Report.    4 Entries listed
```

Figure 97. Sample REPORT07 Output: Inventory of Data Set Names by Location

REPORT08: Inventory of Bin Numbers by Location

REPORT08, as shown in Figure 98 on page 100, includes all volumes residing in one of the three built-in storage locations or installation-defined storage locations. REPORT08 is sorted by storage location, bin number, date stored, and data set name.

The data columns for REPORT08 are:

BIN number

The assigned specific bin number. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Date stored

The date the volume was last moved from or to a new storage location.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following:: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

```

DFSMSrmm Security heading text Inventory of BIN numbers in Storage Location DISTANT PAGE - 1
EDGRPT08 DATE - 2000/341
TIME - 22:38:55
BIN Volume Vol- DSN- Creating Create Create Expiration Date Rec. V
Number Data Set Name Serial Seq. Seq. Jobname Date Time Date stored LBL Fmt S
-----
000005 SSC.VITALREC.SYSTEM.SS1101.G0051V00 SC2378 2 1 DSS1100# 1993/279 225244 1995/294 1995/277 SL 36TR M
000006 SSC.VITALREC.SYSTEM.SC1101.G0045V00 SC1546 1 1 DSC1101# 1993/011 205040 1995/245 1995/220 SL 36TR M
000007 SSC.VITALREC.SYSTEM.SP110A.G0045V00 SC1548 1 1 DSP110A# 1993/011 205307 1995/245 1995/220 SL 36TR M
000011 SSC.VITALREC.SYSTEM.SR1102.G0043V00 SC0985 1 1 DSR1101# 1992/240 212232 1995/231 1995/206 SL 36TR M
000012 SSC.VITALREC.SYSTEM.SR1101.G0043V00 SC0986 1 1 DSR1101# 1992/240 211023 1995/231 1995/206 SL 36TR M
000013 SSC.VITALREC.SYSTEM.SP110C.G0041V00 SC1918 1 1 DSP110A# 1993/097 211026 1995/217 1995/193 SL 36TR M
000041 SSC.VITALREC.SYSTEM.SP110B.G0044V00 SC0682 1 1 DSP110A# 1992/240 210040 1995/238 1995/213 SL 36TR M
End of Report. 7 Entries listed

```

```

DFSMSrmm Security heading text Inventory of BIN numbers in Storage Location REMOTE PAGE - 3
EDGRPT08 DATE - 2000/341
TIME - 22:38:55
BIN Volume Vol- DSN- Creating Create Create Expiration Date Rec. V
Number Data Set Name Serial Seq. Seq. Jobname Date Time Date stored LBL Fmt S
-----
000002 SCHLUM.TMS.DATA 68059C 1 1 1995/086 153951 1995/100 1995/142 SL 18TR U
000002 SCHLUM.TMS.DATA 68059C 1 1 1995/086 153951 1995/100 1995/142 SL 18TR U
000050 SCHLUM.RMMDemo.MMOVE.VOL1 SC1195 1 1 RMMTEST1 1992/265 093450 1995/059 1995/059 SL 18TR M
000055 SCHLUM.RMMDemo.MMOVE.VOL4 SC1196 1 1 RMMTEST4 1992/265 093439 1995/059 1995/059 SL 18TR M
End of Report. 4 Entries listed

```

Figure 98. Sample REPORT08 Output: Inventory of Bin Numbers by Location

REPORT09: List all Data Set Names Residing in a Loan Location

REPORT09, as shown in Figure 99 on page 101, includes all volumes residing in a LOAN location. REPORT01 is sorted by loan location, data set name, create date, and create time.

The data columns for REPORT09 are:

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Volume Ref. Date

The date the volume was last read or last written to.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

VR

The vital record status which can be one of the following:

Y The volume is retained as a vital record.

N The volume is not retained as a vital record.

DFSMSrmm Security heading text		Inventory of Data Set Names in Loan Location KAYSER							PAGE - 1		
EDGRPT09									DATE - 2000/341		
									TIME - 22:38:55		
Data Set Name	Volume Serial	Vol-Seq	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Volume Ref. Date	LBL	Rec. Fmt	V S R
SP.\$2MAJO.\$SMP	SC2035	1	7	CUSTPACK	1993/158	111127	1993/179	1993/165	SL	*	M N
SP.\$2MAJO.BATCH	SC2035	1	8	CUSTPACK	1993/158	111148	1993/179	1993/165	SL	*	M N
SP.\$2MAJO.LIST3820	SC2035	1	9	CUSTPACK	1993/158	111206	1993/179	1993/165	SL	*	M N
SP.EFZ#LIBD.CLIST	SC2035	1	2	CUSTPACK	1993/158	111040	1993/179	1993/165	SL	*	M N
SP.EFZ#LIBD.CLIST.FB	SC2035	1	3	CUSTPACK	1993/158	111043	1993/179	1993/165	SL	*	M N
SP.EFZ#LIBD.LOAD	SC2035	1	4	CUSTPACK	1993/158	111048	1993/179	1993/165	SL	*	M N
SP.EFZ#LIBD.MSGS	SC2035	1	6	CUSTPACK	1993/158	111123	1993/179	1993/165	SL	*	M N
SP.EFZ#LIBD.PANELS	SC2035	1	5	CUSTPACK	1993/158	111120	1993/179	1993/165	SL	*	M N
SP.HENKELCS.LIST3820	SC2035	1	11	CUSTPACK	1993/158	111214	1993/179	1993/165	SL	*	M N
SP.HENKELCS.SCRIPT	SC2035	1	10	CUSTPACK	1993/158	111211	1993/179	1993/165	SL	*	M N
End of Report. 10 Entries listed											

Figure 99. Sample REPORT09 Output: List all Data Set Names that Reside in a Loan Location

REPORT10: List all Volume Serial Numbers Residing in a Loan Location

REPORT10, as shown in Figure 100 on page 103, includes all volumes residing in a loan location. REPORT10 is sorted by loan location, volume serial number, and data set sequence number.

The data columns for REPORT10 are:

Volume Serial

The serial number of the volume where the specified data set resides.

Data Set Name

The data set name of the first file on the volume.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Volume Ref. Date

The date the volume was last read or last written to.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following:: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

VR

The vital record status which can be one of the following:

Y The volume is retained as a vital record.

N The volume is not retained as a vital record.

```
DFSMSrmm Security heading text Inventory of Volumes in Loan Location KAYSER PAGE - 1
EDGRPT10 DATE - 2000/341
TIME - 22:38:55
```

Volume Serial	Data Set Name	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Volume Ref. Date	Rec. LBL	V Fmt	V S R
SC2035	SSC.HENKEL.CNTL	1	1	CUSTPACK	1993/158	110912	1993/179	1993/165	SL *	M N	
SC2035	SP.EFZ#LIBD.CLIST	1	2	CUSTPACK	1993/158	111040	1993/179	1993/165	SL *	M N	
SC2035	SP.EFZ#LIBD.CLIST.FB	1	3	CUSTPACK	1993/158	111043	1993/179	1993/165	SL *	M N	
SC2035	SP.EFZ#LIBD.LOAD	1	4	CUSTPACK	1993/158	111048	1993/179	1993/165	SL *	M N	
SC2035	SP.EFZ#LIBD.PANELS	1	5	CUSTPACK	1993/158	111120	1993/179	1993/165	SL *	M N	
SC2035	SP.EFZ#LIBD.MSGS	1	6	CUSTPACK	1993/158	111123	1993/179	1993/165	SL *	M N	
SC2035	SP.\$2MAJO.\$SMP	1	7	CUSTPACK	1993/158	111127	1993/179	1993/165	SL *	M N	
SC2035	SP.\$2MAJO.BATCH	1	8	CUSTPACK	1993/158	111148	1993/179	1993/165	SL *	M N	
SC2035	SP.\$2MAJO.LIST3820	1	9	CUSTPACK	1993/158	111206	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELCS.SCRIPT	1	10	CUSTPACK	1993/158	111211	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELCS.LIST3820	1	11	CUSTPACK	1993/158	111214	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELST.SCRIPT	1	12	CUSTPACK	1993/158	111220	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELST.LIST3820	1	13	CUSTPACK	1993/158	111254	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELSP.SCRIPT	1	14	CUSTPACK	1993/158	111258	1993/179	1993/165	SL *	M N	
SC2035	SP.HENKELSP.LIST3820	1	15	CUSTPACK	1993/158	111303	1993/179	1993/165	SL *	M N	

End of Report. 15 Entries listed

Figure 100. Sample REPORT10 Output: List all Volume Serial Numbers that Reside in a Loan Location

REPORT11: List MultiVolume and MultiFile Sets

REPORT11, as shown in Figure 101 on page 104, includes all multifile volumes and multivolume files. REPORT11 is sorted by the first file on the first volume of the multivolume or multifile set, multidata set multivolume token, volume sequence number, and data set sequence number.

The data columns for REPORT11 are:

Volume Serial

The serial number of the volume where the specified data set resides.

Vol-Seq.

The volume sequence number.

Vol-Cnt.

The volume count.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Data Set Name

The data set name of the first file on the volume.

Expiration Date

The date the volume should be considered for release.

First Volser

The volume serial number of the first volume in a multivolume data set.

Prev. Volser

The volume serial number of the preceding volume in a sequence of volumes in a multivolume data set.

Next. Volser

The volume serial number of the next volume in a sequence of volumes in a multivolume data set.

Create Userid

The ID of the owner of the volume where the data set resides.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Volume Serial	Vol-Seq.	Vol-Cnt.	DSN-Seq.	Data Set Name	Expiration Date	First Volser	Prev. Volser	Next Volser	Create Userid	Creating Jobname	Create Date	Create Time
SC0464	1	1	1	ADDONS.PANELS		SC0464			SIEGEL		1992/240	084146
SC0464	1	1	2	ADDONS.SKELS		SC0464			SIEGEL		1992/240	084154
SC0464	1	1	3	ADDONS.EXEC		SC0464			SIEGEL		1992/240	084159
SC0464	1	1	4	ADDONS.EXECFB		SC0464			SIEGEL		1992/240	084205
SC0464	1	1	5	ADDONS.MSGS		SC0464			SIEGEL		1992/240	084218
SC0464	1	1	6	ADDONS.INITVARS		SC0464			SIEGEL		1992/240	084223
SC0464	1	1	7	ADDONS.LOAD		SC0464			SIEGEL		1992/240	084226
SC0464	1	1	8	ADDONS.CNTL		SC0464			SIEGEL		1992/240	084232
SC0464	1	1	9	ADDONS.SOURCE		SC0464			SIEGEL		1992/240	084238
SC0464	1	1	10	ADDONS.OBJ		SC0464			SIEGEL		1992/240	084248
Used kilobytes for volume SC0464					2073629							
SC0695	1	5	1	BSYSMF.WEEK.G9519V00	1995/315	SC0694		SC0702	STCOPC	SMFWEEK2	1992/240	140404
SC0695	2	5	1	BSYSMF.WEEK.G9519V00	1995/315	SC0694	SC0695	SC0699	STCOPC	SMFWEEK2	1992/240	140646
SC0695	3	5	1	BSYSMF.WEEK.G9519V00	1995/315	SC0694	SC0702	SC0704	STCOPC	SMFWEEK2	1992/240	140934
SC0695	4	5	1	BSYSMF.WEEK.G9519V00	1995/315	SC0694	SC0699	SC0706	STCOPC	SMFWEEK2	1994/207	141217
SC0695	5	5	1	BSYSMF.WEEK.G9519V00	1995/315	SC0694	SC0704		STCOPC	SMFWEEK2	1992/240	141925
Used kilobytes for volume SC0465					73629							

End of Report. 15 Entries listed

Figure 101. Sample REPORT11 Output: List all MultiVolume and MultiFile Sets

REPORT12: Movement Report by Data Set Name

REPORT12, as shown in Figure 102 on page 106, includes all volumes moving among the three built-in storage locations or installation-defined storage locations. REPORT12 is sorted by destination, storage location, data set name, create date, and create time.

The data columns for REPORT12 are:

Data Set Name

The data set name of the first file on the volume.

Volume Serial

The serial number of the volume where the specified data set resides.

BIN number

The assigned specific bin number. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date the volume should be considered for release.

Date stored

The date the volume was last moved from or to a new storage location.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

DFSMSrmm IBM internal use only EDGRPT12		Movement report by Data Set Names from location SHELF to location DISTANT							PAGE - 1
									DATE - 2000/341
									TIME - 22:38:55
Data Set Name	Volume BIN Serial Number	Vol- Seq.	DSN- Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Date stored	Rec. V LBL Fmt S
SSC.VITALREC.BUILD.DB.G0056V00	SC1235 000071	1	1	VRDB	1992/328	190728	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0056V00	SC1227 000070	2	1	VRDB	1992/328	192741	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0056V00	SC1212 000069	3	1	VRDB	1992/328	194337	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0056V00	SC1211 000068	4	1	VRDB	1992/328	200213	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0056V00	SC1326 000083	5	1	VRDB	1992/339	202009	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0054V00	SC1273 000072	1	1	VRESA	1992/328	203240	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0054V00	SC1808 000107	2	1	VRESA	1993/097	204650	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0054V00	SC1807 000106	3	1	VRESA	1993/097	210317	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0054V00	SC1278 000073	1	1	VRESAS	1992/328	210910	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0054V00	SC1282 000075	2	1	VRESAS	1992/328	212311	1995/302	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0054V00	SC1280 000074	3	1	VRESAS	1992/328	213940	1995/302	1995/277	SL 36TR M

End of Report. 11 Entries listed

DFSMSrmm IBM internal use only EDGRPT12		Movement report by Data Set Names from location DISTANT to location SHELF							PAGE - 3
									DATE - 2000/341
									TIME - 22:38:55
Data Set Name	Volume BIN Serial Number	Vol- Seq.	DSN- Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Date stored	Rec. V LBL Fmt S
SSC.VITALREC.BUILD.DB.G0055V00	SC2389 000058*	1	1	VRDB	1993/279	190825	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00	SC2388 000055*	2	1	VRDB	1993/279	192928	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00	SC2397 000059*	3	1	VRDB	1993/279	194622	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00	SC2034 000054*	4	1	VRDB	1993/158	200505	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.DB.G0055V00	SC2019 000053*	5	1	VRDB	1993/158	202356	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00	SC2001 000050*	1	1	VRESA	1993/158	203557	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00	SC2000 000049*	2	1	VRESA	1993/158	205047	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESA.G0053V00	SC2011 000052*	3	1	VRESA	1993/158	210806	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0053V00	SC0515 000004*	1	1	VRESAS	1992/240	211341	1995/295	1995/277	SL 36TR M
SSC.VITALREC.BUILD.ESAS.G0053V00	SC0514 000003*	2	1	VRESAS	1992/240	212810	1995/295	1995/277	SL 36TR M

End of Report. 10 Entries listed

Figure 102. Sample REPORT12 Output: Movement Report Including the First Data Set Name

REPORT13: Movement Report by Bin Number

REPORT13, as shown in Figure 103 on page 108, includes data set information. REPORT13 is sorted by destination, location, and bin number.

The data columns for REPORT13 are:

BIN Number

The used bin number of this volume in the reported storage location. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Data Set Name

The data set name of the first file on the volume.

Volume Serial

Volume serial number of the reported volume.

Vol-Seq.

Volume sequence of the reported volume.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

Creation date of the reported data set.

Create Time

Creation time of the reported data set.

Expiration Date

DFSMSrmm expiration date of the reported volume.

Date stored

Date that the move for the volume to the reported storage location is confirmed.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

BIN Number	Data Set Name	Volume Serial	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Date stored	Rec. LBL	V Fmt S
000001*	SSC.VITALREC.BUILD.PP.G0180V00	Q17032	1	1	VRPP	20/02/1998	132015	25/02/1998	03/03/1998	SL	128T M
000002*	SSC.VITALREC.BUILD.NET.G0179V00	Q17057	1	1	VRNET	20/02/1998	134031	25/02/1998	03/03/1998	SL	128T M
000003*	SSC.VITALREC.BUILD.DB.G0187V00	Q17085	1	1	VRDB	20/02/1998	130340	25/02/1998	03/03/1998	SL	128T M
000004*	SSC.VITALREC.MASTER.JCL.G0174V00	Q17136	1	1	VRMASTER	21/02/1998	024340	26/02/1998	03/03/1998	SL	128T M
000005*	SSC.VITALREC.BUILD.WWC150.G0056V00	Q17138	1	1	VRWVC150	20/02/1998	141157	25/02/1998	03/03/1998	SL	128T M
000007*	SSC.VITALREC.BUILD.WWZ38#.G0055V00	Q17139	1	1	VRWWZ38#	20/02/1998	154308	25/02/1998	03/03/1998	SL	128T M
000008*	SSC.VITALREC.BUILD.WWZ038.G0058V00	Q17140	1	1	VRWWZ038	20/02/1998	175618	25/02/1998	03/03/1998	SL	128T M
000009*	SSC.VITALREC.BUILD.W3897A.G0031V00	Q17143	1	1	VRW3897A	20/02/1998	203407	25/02/1998	03/03/1998	SL	128T M
000012*	SSC.VITALREC.BUILD.W3897A.G0031V00	Q17144	2	1	VRW3897A	20/02/1998	234947	26/02/1998	03/03/1998	SL	128T M
000017*	SSC.VITALREC.BUILD.MVSSMP.G0178V00	Q17145	1	1	VRMVSSMP	20/02/1998	140108	25/02/1998	03/03/1998	SL	128T M
000019*	SSC.VITALREC.BUILD.WWP004.G0056V00	Q17146	1	1	VRWWP004	20/02/1998	144519	25/02/1998	03/03/1998	SL	128T M
000020*	SSC.VITALREC.BUILD.WWP115.G0056V00	Q17147	1	1	VRWWP115	20/02/1998	150147	25/02/1998	03/03/1998	SL	128T M
000021*	SSC.VITALREC.BUILD.W3897B.G0006V00	Q17148	1	1	VRW3897B	21/02/1998	002806	26/02/1998	03/03/1998	SL	128T M
000022*	SSC.VITALREC.FILTER.SELECT.G0174V00	Q17149	1	1	VRSELECT	21/02/1998	022738	26/02/1998	03/03/1998	SL	128T M

End of Report. 14 Entries listed

Figure 103. Sample REPORT13 Output: Movement Report Including the First Data Set Name Sorted by Bin Number

REPORT14: Movement Report by Volume Serial Number

REPORT14, as shown in Figure 104 on page 109, includes data sets. REPORT14 is sorted by destination, location, and volume serial number.

The data columns for REPORT14 are:

Volume Serial

The volume serial number of the reported volume.

Data Set Name

The data set name of the first file on the volume.

BIN Number

The used bin number of this volume in the reported storage location. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Vol-Seq.

Volume sequence of the reported volume.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

Creation date of the reported data set.

Create Time

Creation time of the reported data set.

Expiration Date

DFSMSrmm expiration date of the reported volume.

Date stored

Confirm date of the move to the reported storage location.

LBL

The tape label type which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format which can be one of the following: 18TR, 36TR, 128T, 256T, or blank.

VS

The volume status which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

```
DFSMSrmm  IBM INTERNAL USE ONLY
EDGRPT14
```

		Movement reportby Volume Serial Number						PAGE - 1				
		from location DISTANT to location ATL3494E						DATE - 2000/341				
								TIME - 22:38:55				
Volume	Serial	Data Set Name	BIN Number	Vol-Seq.	DSN-Seq.	Creating Jobname	Create Date	Create Time	Expiration Date	Date stored	Rec. LBL	V Fmt S
Q17032	SSC.VITALREC.BUILD.PP.G0180V00	000001*	1	1	VRPP	20/02/1998	132015	25/02/1998	03/03/1998	SL	128T	M
Q17057	SSC.VITALREC.BUILD.NET.G0179V00	000002*	1	1	VRNET	20/02/1998	134031	25/02/1998	03/03/1998	SL	128T	M
Q17085	SSC.VITALREC.BUILD.DB.G0187V00	000003*	1	1	VRDB	20/02/1998	130340	25/02/1998	03/03/1998	SL	128T	M
Q17136	SSC.VITALREC.MASTER.JCL.G0174V00	000004*	1	1	VRMASTER	21/02/1998	024340	26/02/1998	03/03/1998	SL	128T	M
Q17138	SSC.VITALREC.BUILD.WWC150.G0056V00	000005*	1	1	VRWVC150	20/02/1998	141157	25/02/1998	03/03/1998	SL	128T	M
Q17139	SSC.VITALREC.BUILD.WWZ38#.G0055V00	000007*	1	1	VRWWZ38#	20/02/1998	154308	25/02/1998	03/03/1998	SL	128T	M
Q17140	SSC.VITALREC.BUILD.WWZ038.G0058V00	000008*	1	1	VRWWZ038	20/02/1998	175618	25/02/1998	03/03/1998	SL	128T	M
Q17143	SSC.VITALREC.BUILD.W3897A.G0031V00	000009*	1	1	VRW3897A	20/02/1998	203407	25/02/1998	03/03/1998	SL	128T	M
Q17144	SSC.VITALREC.BUILD.W3897A.G0031V00	000012*	2	1	VRW3897A	20/02/1998	234947	26/02/1998	03/03/1998	SL	128T	M
Q17145	SSC.VITALREC.BUILD.MVSSMP.G0178V00	000017*	1	1	VRMVSSMP	20/02/1998	140108	25/02/1998	03/03/1998	SL	128T	M
Q17146	SSC.VITALREC.BUILD.WWP004.G0056V00	000019*	1	1	VRWWP004	20/02/1998	144519	25/02/1998	03/03/1998	SL	128T	M
Q17147	SSC.VITALREC.BUILD.WWP115.G0056V00	000020*	1	1	VRWWP115	20/02/1998	150147	25/02/1998	03/03/1998	SL	128T	M
Q17148	SSC.VITALREC.BUILD.W3897B.G0006V00	000021*	1	1	VRW3897B	21/02/1998	002806	26/02/1998	03/03/1998	SL	128T	M
Q17149	SSC.VITALREC.FILTER.SELECT.G0174V00	000022*	1	1	VRSELECT	21/02/1998	022738	26/02/1998	03/03/1998	SL	128T	M

End of Report. 14 Entries listed

Figure 104. Sample REPORT14 Output: Movement Report Including the First Data Set Name Sorted by Volume Serial Number

REPORT15: Inventory List By Volume Including Volume Count

REPORT15, as shown in Figure 105 on page 111, provides a count of the maximum number of tapes in a multivolume chain. If a volume is not part of a multivolume chain, the count is set to 1. REPORT15 is sorted by volume serial number and data set sequence number.

The data columns for REPORT15 are:

Volume Serial

The volume serial number.

Data Set Name

The data set name of the first file on the volume.

Vol-Seq.

The sequence number of the volume.

Vol-Cnt.

The volume count.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Create Date

The date when the data set was created.

Create Time

The time when the data set was first written to tape.

Vol Scr

The scratch status of the volume.

YES

The volume is scratch.

NO

The volume is not scratch.

Location Name

The storage location, loan location, or blank if the volume resides in its home location.

BIN number

The assigned specific bin number. An asterisk (*) following the bin number indicates that the bin number is the old bin number. The old bin number is displayed when no current bin number is set for the volume.

Volume Serial	Data Set Name	Vol- Seq.	Vol- Cnt.	DSN- Seq.	Create Date	Create Time	Vol Scr	Location Name	BIN Number
A00001	D027182.DSN1	1	10	1	2002/205	063628	NO	MAINZ	*
A00001	OWRTST.LAGER	1	10	2	2002/205	063628	NO	MAINZ	*
A00002	OWRTST.LAGER	2	10	1	2002/205	063628	NO	MAINZ	*
A00003	OWRTST.LAGER	3	10	1	2002/205	063629	NO	MAINZ	*
A00004	RMMTST.EXTRACT.FILE	4	10	1	2002/205	063629	NO	MAINZ	*
A00004	RMMTST.REPORT.FILE	4	10	2	2002/205	063629	NO	MAINZ	*
A00004	RMMTST.ACTIVITI.FILE	4	10	3	2002/205	063629	NO	MAINZ	*
A00005	RMMTST.JOURNAL.BACKUP	5	10	1	2002/205	063629	NO	MAINZ	*
A00006	SYS1.PARMLIB	6	10	1	2002/205	063629	NO	MAINZ	*
A00007	SYS1.PARMLIB	7	10	1	2002/205	063630	NO	MAINZ	*
A00007	SYS1.PROCLIB	7	10	2	2002/205	063630	NO	MAINZ	*
A00008	SYS1.MASTER.JCL	8	10	1	2002/205	063630	NO	MAINZ	*
A00009	SYS1.MASTER.JCL	9	10	1	2002/205	063630	NO	MAINZ	*
A00010	SYS1.DFSMS.JCL	10	10	1	2002/205	063630	NO	MAINZ	*
P00001	D027182.PRIVAT.TESTDSN	1	1	1	2002/205	063631	NO		*
P00002	D027182.PRIVAT.TESTJCL	1	1	1	2002/205	063631	NO		*
P00003	D027182.PRIVAT.EXEC	1	1	1	2002/205	063631	NO		*

End of Report. 17 Entries listed

Figure 105. Sample REPORT15 Output: Inventory List of Volumes Including the Volume Count

REPORT16: List All Duplicate Volume Serial Numbers

REPORT16, as shown in Figure 106 on page 112, includes all duplicate volume serial numbers. The report is sorted by VOL1 number and then by volume serial number.

The data columns for REPORT16 are:

Volume VOL1

The VOL1 label number. These are volumes that are defined to DFSMSrmm with a unique external volume serial number and a VOL1 label that might duplicate another volume but that does not match its own external volume serial number.

Volume Serial

The serial number of the volume where the specified data set resides.

Data Set Name

The data set name of the first file on the volume.

Vol-Seq.

The volume sequence number.

DSN-Seq.

The data set sequence number or the relative position of the data set on the volume if the data set sequence number is blank or zero.

Creating Jobname

The name of the job that created the data set or that created the first data set on the volume if the creating jobname field is blank.

Create Date

The date when the data set was first written to tape.

Create Time

The time of day when the data set was created.

Expiration Date

The date that the volume should be considered for release.

Volume Ref. Date

The date that information on the volume was last read or last written.

LBL

The tape label type, which can be one of the following:

SL

Specifies an IBM standard label.

AL

Specifies an ANSI label.

NL

Specifies no label.

SUL

Specifies an IBM standard label with user labels.

AUL

Specifies an ANSI label with user labels.

Rec. Fmt

The volume recording format, which can be one of the following: 18TR, 36TR, 128T, 256T, 384T, or blank.

VS

The volume status, which can be one of the following:

S SCRATCH

M MASTER

U USER

I INIT

E ENTRY

VR

The vital record status, which can be one of the following:

Y The volume is retained as a vital record.

N The volume is not retained as a vital record.

Volume		Vol-	DSN-	Creating	Create	Create	Expiration	Volume	Rec.	V	V
VOL1	Serial Data Set Name	Seq.	Seq.	Jobname	Date	Time	Date	Ref. Date	LBL	Fmt	S R
A06412	D06412 RMMUSER.TAPE12	1	1	RMMUSERJ	13/05/2002	032354	18/05/2002	13/05/2002	SL	18TR	U N
A06477	D06414 RMMUSER.TAPE77	1	1	RMMUSERJ	13/05/2002	034523	18/05/2002	13/05/2002	SL	18TR	U N
A06488	D06410 RMMUSER.TAPE88	1	1	RMMUSERJ	13/05/2002	034902	18/05/2002	13/05/2002	SL	18TR	U N

End of Report. 3 Entries listed

Figure 106. Sample REPORT16 Output: List all Duplicate Volume Serial Numbers

Chapter 6. Using DFSMSrmm with DFSORT

You can use DFSORT's multipurpose ICETOOL utility to create reports from the data in DFSMSrmm extract data set, activity report, and System Management Facility (SMF) records.

DFSMSrmm provides sample jobs that use DFSORT, often using ICETOOL, to produce sample reports.

If you are not familiar with DFSORT and ICETOOL, or just want to learn more about them, visit the DFSORT home page on the Web at <http://www.ibm.com/storage/dfsort/>

The DFSORT home page has papers and examples you can browse, links to the online DFSORT documents, tips, and more. You can browse or download an ICETOOL mini-user guide, learn about the major features of DFSORT Release 14, see answers to frequently asked questions, and so on.

Related Reading: For a tutorial on using DFSORT and ICETOOL, see *Getting Started with DFSORT Release 14*. For complete details about DFSORT and DFSORT's ICETOOL, see *DFSORT Application Programming Guide Release 14*. You can access both of these documents online from the DFSORT home page.

Using DFSORT's ICETOOL

You can use the DFSMSrmm-supplied samples without modification or use them as examples to produce specific customized reports from DFSMSrmm information. You can change the DFSORT or ICETOOL control statements and job steps to create reports for your installation. Consider these things that you can do to the samples for use in your installation.

JOB card

You might submit jobs from Time Sharing Option (TSO) and have your system automatically generate a job card for you. If a job card is not automatically generated, provide a job card by replacing the commented job card with one that is acceptable on your system.

Work Space

DFSORT and ICETOOL can generally automatically allocate any resources they need, such as work space, storage, Hiperspace™, dataspace, and so on. The resources allocated are based on system information, data set information, and the DFSORT installation defaults that are specified by your site. However, if necessary, you can change the resources used by DFSORT and ICETOOL in a variety of ways including:

- Specifying run-time options for the type and maximum number of dynamically allocated work data sets, the maximum amount of storage, Hiperspace or dataspace, and so on. For example, you can specify:

```
//DFSPARM DD *  
  OPTION DYNALLOC=(3390,8)  
/*
```

to tell DFSORT or ICETOOL to allocate a maximum of eight work data sets on 3390 devices (instead of the IBM-supplied default of three work data sets on SYSDA devices).

- Specifying JCL work data sets. For example, you can specify:

```
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(50,50))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(50,50))
```

to tell DFSORT or ICETOOL to use the two JCL work data sets specified, instead of dynamically allocating the work data sets.

DSN keyword

You do not need to change the DSN keyword where temporary data set names are specified. When a specific data set name is used, you should change the name to one that can be used in your installation.

SPACE keyword

You can change the SPACE keyword values. Examine your installation's tape activities and perform trial runs to arrive at suitable values for primary and secondary space.

UNIT keyword

You can change the UNIT name used as required. Specify a value that will allocate to a DASD device type.

Creating DFSMSrmm SMF Audit Record Reports

Figure 107 on page 115 shows the sample JCL for processing SMF records. The sample uses the following information, taken from the volume details within the SMF record:

- Volume serial number
- Volume creation date
- Date that the volume information last changed
- User ID that last changed the volume information by command
- Date that the volume information was last changed by an RMM TSO subcommand request

The report also includes the following information which is taken from the SMF record header:

- Time
- Date
- System identification
- RACF user ID
- Activity type

The ICETOOL JCL example in Figure 107 on page 115 performs the following functions:

1. Uses a COPY operator to create a data set with just the SMF audit (X'FC') volume records (V) for use by the subsequent DISPLAY operator.
2. Uses a DISPLAY operator to create an SMF audit record for the V records.

You must add 1 to an SMF field offset to get its position for DFSORT and ICETOOL statements. Alternatively, you can use DFSORT symbols, which map the DFSMSrmm fields you need, freeing you from having to know their positions, lengths, and formats. See "Using Symbols with DFSORT's ICETOOL and DFSORT" on page 117 for more information about using symbols.

```

//STEP1 EXEC PGM=ICETOOL
//TOOLMSG DD SYSOUT=* ICETOOL MESSAGES
//DFSMSG DD SYSOUT=* DFSORT MESSAGES
//RAWSMF DD DSN=ACCT.SJFEMVSA.D921102.T230004,DISP=SHR
//RMMV DD DSN=&&TEMPV,REFDD=*.RAWSMF
//VREPT DD SYSOUT=*
//TOOLIN DD * CONTROL STATEMENTS
* FIND THE RMM SMF AUDIT 'VOLUME' RECORDS
COPY FROM(RAWSMF) TO(RMMV) USING(SMFV)
* DISPLAY VARIOUS FIELDS FROM THE SMF HEADER AND VOLUME SECTION
DISPLAY FROM(RMMV) LIST(VREPT) -
TITLE('DFSMSrmm - SMF Audit Records') DATE TIME PAGE -
BLANK -
* SMF HEADER FIELDS
HEADER('TIME') ON(8,3,HEX) -
HEADER('DATE') ON(11,4,PD) -
HEADER('SYS') ON(15,4,CH) -
HEADER('USER') ON(35,8,CH) -
HEADER('ACT') ON(43,1,CH) -
* VOLUME SECTION FIELDS
HEADER('VOLUME') ON(46,6,CH) -
HEADER('CREATE') ON(104,4,PD) -
HEADER('LASTCH') ON(128,4,PD) -
HEADER('LASTUSER') ON(136,8,CH) -
HEADER('LASTSYS') ON(144,8,CH) -
HEADER('LASTUSCH') ON(152,4,PD)
//SMFVCNTL DD *
* The X'FC' is the SMF record number specified to RMM SMFAUD
* The X'FC' is record number 252 - Change it to your record number
INCLUDE COND=(6,1,BI,EQ,X'FC',AND,
44,1,CH,EQ,C'V')
OPTION VLSHRT
/*

```

Figure 107. Sample ICETOOL JCL for Processing SMF Records

See Figure 113 on page 123 for the equivalent sample JCL using DFSORT symbols.

Figure 108 shows sample report output for the SMF audit report.

```

RMM SMF AUDIT RECORDS      11/05/97      07:40:13      - 1 -

```

TIME	DATE	SYS	USER	ACT	VOLUME	CREATE	LASTCH	LASTUSER	LASTSYS	LASTUSCH
63202A	97307	MVSA	HOLLYYAM	C	ND0335	1997058	1997307	TAPELIB	MVSA	1997058
6321B6	97307	MVSA	YAEGER	C	ND0336	1997058	1997307	TAPELIB	MVSA	1997058
6321B8	97307	MVSA	WILLITS	C	ND0339	1997058	1997307	TAPELIB	MVSA	1997058
.
853C1A	97307	MVSA	YAEGER	C	ND0338	1997035	1997307	TAPELIB	MVSA	1997035
863C24	97307	MVSA	JMB01	C	NB1876	1996271	1997307	TAPELIB	MVSA	1996271

Figure 108. Sample DISPLAY Report (VREPT DD)

Producing Commands and Reports from the Extract Data Set

This example shows two tasks that you can perform with ICETOOL. The examples use the DFSMSrmm extract data set as input. In this case, the volume extract records, as described in Appendix B, “DFSMSrmm Mapping Macros”, on page 205, are used to perform the following functions:

- Create RMM CHANGEVOLUME subcommands to set a release action of REPLACE for all tapes with temporary input/output (I/O) errors higher than a specific number. For this example, an arbitrary value of 100 is used for the temporary I/O error limit.
- Create a report showing the number of tapes with each security level classification.

The ICETOOL JCL example in Figure 109 performs the following functions:

1. Uses a COPY operator to create a data set with just the extract volume (V) records for use by subsequent operators.
2. Uses a COPY operator to create CHANGEVOLUME commands for those V records with temporary I/O counts greater than 100.
3. Uses an OCCUR operator to create a security level distribution report for the V records.

You must add 5 to an extract field offset shown in Appendix B, “DFSMSrmm Mapping Macros”, on page 205 to get its position for DFSORT and ICETOOL statements. Alternatively, you can use DFSORT symbols, which map the DFSMSrmm fields you need, freeing you from having to know their positions, lengths, and formats. See “Using Symbols with DFSORT’s ICETOOL and DFSORT” on page 117 for more information about using symbols.

```
//STEP1 EXEC PGM=ICETOOL
//TOOLMSG DD SYSOUT=*
//DFSMSG DD SYSOUT=*
//IN1 DD DSN=RMM.MASTER.EXTRACT,DISP=SHR
//VRCDS DD DSN=&&IN2,UNIT=SYSDA,SPACE=(1,(1000,1000),RLSE),
// DISP=(,DELETE),DSORG=PS,RECFM=VB,AVGREC=K
//COMMANDS DD DSN=RMM.RLSE.CLIST,DISP=(,CATLG),
// LRECL=255,RECFM=VB,DSORG=PS,AVGREC=K,SPACE=(255,(1,1),RLSE)
//OCCRPT DD SYSOUT=*
//TOOLIN DD *
* GET JUST THE 'V' RECORDS
COPY FROM(IN1) TO(VRCDS) USING(CTL2)
* SET UP THE CHANGEVOLUME COMMANDS FOR TAPES WHICH EXCEED
* THE TEMPORARY I/O ERROR LIMIT OF 100
COPY FROM(VRCDS) TO(COMMANDS) USING(CMDT)
* PRINT REPORT SHOWING SECURITY LEVEL DISTRIBUTION
OCCUR FROM(VRCDS) LIST(OCCRPT) BLANK -
DATE TITLE('Security Level Distribution Report') -
HEADER('Security Level') ON(280,4,CH) -
HEADER('Number in Level') ON(VALCNT)
//CTL2CNTL DD *
* INCLUDE ONLY 'V' RECORDS
INCLUDE COND=(5,1,CH,EQ,C'V')
//CMDTCNTL DD *
* INCLUDE ONLY RECORDS WITH TEMPORARY I/O ERROR COUNTS
* GREATER THAN 100
INCLUDE COND=((371,4,CH,GT,C' 100'),OR,(375,4,CH,GT,C' 100'))
* BUILD CHANGEVOLUME COMMANDS
OUTREC FIELDS=(1,4,C'RMM CV ',9,6,
C' RLSE(REPLACE)')
```

Figure 109. Sample ICETOOL JCL for Processing Extract Records

Figure 110 on page 117 shows sample CHANGEVOLUME command output.

```

RMM CV AB1863 RLSE(REPLACE)
RMM CV CD0001 RLSE(REPLACE)
RMM CV 119063 RLSE(REPLACE)
RMM CV CD0004 RLSE(REPLACE)
RMM CV CD0007 RLSE(REPLACE)
RMM CV CD0008 RLSE(REPLACE)
RMM CV CD0009 RLSE(REPLACE)
RMM CV CD0011 RLSE(REPLACE)
RMM CV CD0015 RLSE(REPLACE)

```

Figure 110. Sample RMM TSO Subcommands (COMMANDS DD)

Figure 111 shows sample report output.

```

11/05/97      Security Level Distribution Report

Security Level  Number in Level
-----
IC              108
ICR             9094
IUO            310
NONE           4006
UNC             9
UNC            192

```

Figure 111. Sample OCCUR Report (OCCRPT DD)

Using Symbols with DFSORT's ICETOOL and DFSORT

You can use DFSORT symbols in ICETOOL and DFSORT jobs to create reports for DFSMSrmm-managed resources. DFSORT symbols provide the positions, lengths, and formats of the fields and the values of the constants associated with DFSMSrmm data you are processing with ICETOOL and DFSORT.

IBM's development teams for DFSMS™ and DFSORT have already created DFSORT symbols, and sample jobs that use them, for data that are associated with DFSMSrmm. You can obtain these IBM-created materials as described in Appendix A, "DFSORT Symbols for Use with DFSMSrmm", on page 163. Then you can substitute the symbols for the DFSMSrmm fields you need into ICETOOL and DFSORT jobs.

This section provides an overview of how DFSORT symbols work in general, as well as a specific example of their use for DFSMSrmm reporting.

Related Reading: For additional information on DFSORT symbols, see *DFSORT Application Programming Guide Release 14* and *Getting Started with DFSORT*.

How Symbols Help

Symbols can help standardize your DFSORT applications and increase your productivity. You can use a symbol anywhere you can use a field or constant in any DFSORT control statement or ICETOOL operator. DFSORT symbols can be up to 50 characters, are case-sensitive and can include underscore characters. Thus, you can create meaningful, descriptive names for your symbols, such as `Price_of_Item`, making them easy to remember, read, and understand.

A field symbol defines a field in terms of its position, length, and format. A constant symbol defines a constant in terms of its literal, numeric or bit value. Once you

make a symbol available, you free yourself from the sometimes tedious process of figuring out its position, length, format or value. No more confusion over offsets versus positions and whether to add 4 for the record descriptor word (RDW). No more recoding positions in statements for multiple DFSORT and ICETOOL jobs when you add, delete, or rearrange fields in your data sets.

Using Symbols

To use symbols with DFSORT and ICETOOL jobs, follow these steps:

1. Create or obtain DFSORT symbol data sets that describe the data you want to process. Symbol data sets contain symbols that map the fields in your records, and constants used for comparisons, titles, headings, and so on. The symbols are specified in DFSORT's simple but flexible SYMNAMES statement format, which is described in "SYMNAMES Statements" on page 120. You can easily add, delete, or modify symbols using an editor, such as ISPF EDIT.
2. Include a SYMNAMES DD statement specifying the symbol data sets that you want to use. You can use SYMNAMES to specify one symbol data set or many concatenated symbol data sets.
3. Use the symbols from SYMNAMES in DFSORT control statements and ICETOOL operators. You can mix symbols (for example, Last_Name) with regular fields (for example, 20,5,CH) and constants (for example, C'Yaeger').

DFSORT reads SYMNAMES and uses the symbols it contains to transform your "statements with symbols" into "statements without symbols" by performing symbol substitution. DFSORT will then use the transformed statements (that is, the statements without symbols) as if you had specified them directly.

Typically, you would set up a symbol data set to map the record layout (that is, the fields and constants) of each data set you process frequently with DFSORT or ICETOOL. For example, Figure 112 on page 119 shows a sample symbol data set named ACCOUNTS.SYMBOLS, which contains symbols for a variable-length (VB) data set named ACCOUNTS. You would use the symbols from ACCOUNT.SYMBOLS in DFSORT and ICETOOL statements that process ACCOUNTS. Then, any time you changed the record layout of ACCOUNTS (for example, by rearranging fields), you would make a corresponding change to ACCOUNTS.SYMBOLS. That way, you wouldn't have to change your jobs that use ACCOUNTS when you changed its record layout. DFSORT would use your symbols to automatically give you the correct new positions. This would save you time and help you avoid errors.


```

* Symbols for the fields and constants of ACCOUNTS
RDW,1,4
  Record_Length,=,2,bi
  SKIP,2
Account_Number,*,8,ch
Balance,*,9,zd
  Gift_Level#1,250000  2500.00
  Gift_Level#2,500000  5000.00

* Branch_Location and Branches are the same field with
* different formats.
Branch_Location,*,2,ch
  California,'01'
  Oregon,'95'
  Washington,'18'
  Arizona,'22'
  Florida,'16'
  Alabama,'25'
  North_Carolina,'92'
Branches,=,2,SS
  West,'01,95,18,22'
  South,'16,25,92'

* First_Name and Last_Name are subfields of Full_Name
Full_Name,*,40,ch
  Last_Name,=,20,ch
  First_Name,*,20,ch
SKIP,2      Not used
Type,*,2,ch
  Checking,'CH'
  Money_Market,'MM'
  Certificate,'CD'
Transactions,*,2,pd
  High_Activity,200
ERR_FLAG,*,1,bi
  Invalid,x'FF'
  Bad_Check,x'80'
  Bad_Credit,x'40'
  No_Funds,x'20'
* Alternate forms for No_Funds
  No_Funds_A,b'..1.....'
  No_Funds_B,B'00100000'
Other_Accounts,*  Variable information

```

Figure 112. Symbol Data Set (ACCOUNTS.SYMBOL)

SYMNAMES and SYMNOUT DD Statements

To use symbol processing in your DFSORT or ICETOOL jobs, include a SYMNAMES DD statement pointing to one or more symbol data sets you want to use (concatenation is allowed). A symbol data set must have LRECL=80 and RECFM=F or RECFM=FB. It can be a sequential data set, a partitioned member, or a DD * data set.

To print your original SYMNAMES statements and the symbol table DFSORT builds from them, include a SYMNOUT DD statement. RECFM=FBA and LRECL=121 will be used for the SYMNOUT data set, which would typically be SYSOUT=*. It's a good idea to include a SYMNOUT data set until your SYMNAMES statements are debugged.

SYMNAMES Statements

A SYMNAMES statement can be a symbol statement, keyword statement, comment statement (starts with * in position 1) or blank statement (blanks in positions 1 through 80). ACCOUNTS.SYMBOLS contains all four types of SYMNAMES statements.

Symbol Statements

Each symbol in SYMNAMES must be described using a symbol statement. A symbol statement looks like this:

```
symbol,value <optional remark>
```

Leading blanks are allowed before the symbol, so use indentation to aid readability. In ACCOUNTS.SYMBOLS, Last_Name and First_Name are indented to show they are subfields of Full_Name, and each constant symbol is indented to show the field symbol it's associated with.

A symbol can be 1 - 50 characters consisting of uppercase and lowercase letters (A - Z, a - z), underscore (_), dollar sign (\$), at sign (@), and number sign (#). Numbers (0-9) can be used for the second and subsequent characters. Symbols are treated as case-sensitive: Frank, FRANK, and frank are three different symbols.

Symbol Statements For Constants

A symbol statement for a constant looks like this:

```
symbol,constant <optional remark>
```

You can use any character string, hexadecimal string, bit string or decimal number recognized in DFSORT or ICETOOL statements as the constant. The constant in a symbol statement can be specified as:

- A character string in the form 'string', C'string' or c'string'. You can use the three forms interchangeably. In ACCOUNTS.SYMBOLS, West is a character string.
- A hexadecimal string in the form X'string' or x'string'. You can use the two forms interchangeably. In ACCOUNTS.SYMBOLS, Invalid is a hexadecimal string.
- A bit string in the form B'string' or b'string'. You can use the two forms interchangeably. In ACCOUNTS.SYMBOLS, No_Funds_A and No_Funds_B are two different types of bit strings.
- A decimal number in the form n, +n or -n. You can use n and +n interchangeably. In ACCOUNTS.SYMBOLS, Gift_Level#1 is a decimal number.

Symbol Statements For Fields

A symbol statement for a field looks like this:

```
symbol,field <optional remark>
```

The field in a symbol statement can be specified as p,m,f (position, length, and format), p,m (position and length) or p (position only).

p can be a number, an asterisk (*) or an equal sign (=).

An * assigns the next position to p. It allows you to map consecutive fields in your records without having to compute their actual positions or recompute their positions when you add, remove, or rearrange fields. In ACCOUNTS.SYMBOLS, Balance has an * to show it starts immediately after Account_Number. An * can also be used to create mappings of contiguous fields using concatenated symbol data sets.

An = assigns the previous position to p. It allows you to map subfields without specifying their actual positions. In ACCOUNTS.SYMBOLS, Last_Name has an = to show it starts at the same position as Full_Name.

An m can be a number or an equal sign (=). An f can be any format recognized in DFSORT or ICETOOL statements or an equal sign (=). An = assigns the previous length or format to m or f, respectively.

You can specify p,m,f for your field symbols and then use them in DFSORT statements where p,m is required. DFSORT will cleverly substitute p,m rather than p,m,f when appropriate. For example, if you use these DFSORT statements with symbols from ACCOUNTS.SYMBOLS:

```
SORT FIELDS=(Type,A)
SUM FIELDS=(Balance)
OUTREC FIELDS=(RDW,Type,15:Balance)
```

DFSORT will transform them to:

```
SORT FIELDS=(66,2,CH,A)
SUM FIELDS=(13,9,ZD)
OUTREC FIELDS=(1,4,66,2,15:13,9)
```

DFSORT automatically substituted p,m,f for the SORT and SUM fields and p,m for the OUTREC fields, as required by its syntax rules.

Keyword Statements

Keyword statements can help you map the fields in your records by letting you set a starting position, skip unused bytes, and align fields on specific boundaries. The available keyword statements are:

- POSITION,q - sets the next position and previous position to q for use with * and = in a subsequent field symbol. For example:

```
POSITION,8
Syma,*,2,FI
```

assigns position 8 to Syma.

- POSITION,symbol - sets the next position and previous position to the position of the specified field symbol for use with * and = in a subsequent field symbol. POSITION,symbol can be used like the Assembler ORG instruction. For example:

```
Sym1,20,10,BI
Sym2,*,18,CH
Sym3,*
POSITION,Sym1
Sym4,*,6,ZD
Sym5,*,4,ZD
```

assigns position 20 to Sym4 (that is, Sym4 and Sym5 overlay Sym1).

- SKIP,n - skips n bytes for use with * in a subsequent field symbol.
- ALIGN,x - aligns the next position on a specific boundary for use with * in a subsequent field symbol. x can be H for halfword alignment, F for fullword alignment or D for doubleword alignment.

Symbols in DFSORT Statements

You can use symbols in the following DFSORT control statements wherever you can use constants ('string', C'string', X'string', B'string', n, +n, or -n) and fields (p,m,f or p,m or p): INCLUDE, INREC, MERGE, OMIT, OUTFIL, OUTREC, SORT and

SUM. Control statements in DFSPARM, SYSIN, SORTCNTL and the parameter list passed from a calling program can all use symbols.

When SYMNames is present, DFSORT transforms control statements with symbols to control statements without symbols, and uses the transformed statements as if you had specified them directly. DFSORT lists both the original statements and the transformed statements.

Symbols in ICETOOL Statements

You can use symbols in the following ICETOOL operators wherever you can use constants ('string', n, +n or -n) and fields (p,m,f or p,m): DISPLAY, OCCUR, RANGE, SELECT, STATS, UNIQUE, and VERIFY. Operators in TOOLIN and in the parameter list passed from a calling program and DFSORT control statements in xxxxCNTL and DFSPARM, can all use symbols.

When SYMNames is present, ICETOOL transforms ICETOOL and DFSORT statements with symbols to statements without symbols, and uses the transformed statements as if you had specified them directly. ICETOOL lists both the original statements and the transformed statements.

SMF Audit Report Using DFSORT Symbols

Figure 113 on page 123 shows a version of the same sample job that was shown in Figure 107 on page 115. However, this example uses the DFSORT symbols found in the EDGSMFSY symbol mapping that is described in Appendix A, "DFSORT Symbols for Use with DFSMSrmm", on page 163.

```

//STEP1 EXEC PGM=ICETOOL
//SYMNAMES DD DISP=SHR,DSN=SYS1.MACLIB(EDGSMFSY) SYMBOLS
//TOOLMSG DD SYSOUT=* ICETOOL MESSAGES
//DFSMSG DD SYSOUT=* DFSORT MESSAGES
//RAWSMF DD DSN=ACCT.SJFEMVSA.D921102.T230004,DISP=SHR
//RMMV DD DSN=&&TEMPV,REFDD=*.RAWSMF
//VREPT DD SYSOUT=*
//TOOLIN DD * CONTROL STATEMENTS
* FIND THE RMM SMF AUDIT 'VOLUME' RECORDS
COPY FROM(RAWSMF) TO(RMMV) USING(SMFV)
* DISPLAY VARIOUS FIELDS FROM THE SMF HEADER AND VOLUME SECTION
DISPLAY FROM(RMMV) LIST(VREPT) -
TITLE('DFSMSrmm - SMF Audit Records') DATE TIME PAGE -
BLANK -
* SMF HEADER FIELDS
HEADER('TIME') ON(SMFADTME,HEX) -
HEADER('DATE') ON(SMFADDTE) -
HEADER('SYS') ON(SMFADSID) -
HEADER('USER') ON(SMFADUID) -
HEADER('ACT') ON(SMFADACT) -
* VOLUME SECTION FIELDS
HEADER('VOLUME') ON(MVVOLSER) -
HEADER('CREATE') ON(MVCRDATE) -
HEADER('LASTCH') ON(MVLCDATE) -
HEADER('LASTUSER') ON(MVLCUID) -
HEADER('LASTSYS') ON(MVLCSID) -
HEADER('LASTUSCH') ON(MVUCDATE)
//SMFVCNTL DD *
* The X'FC' is the SMF record number specified to RMM SMFAUD
* The X'FC' is record number 252 - Change it to your record number
INCLUDE COND=(SMFADRTY,EQ,X'FC',
AND,MVTYPE,EQ,MVTYPEID)
OPTION VLSHRT
/*

```

Figure 113. Sample ICETOOL JCL for Processing SMF Records Using Symbols

Chapter 7. Using DFSMSrmm-Supplied Sample Reports

DFSMSrmm provides sample jobs that you can use to create reports by using DFSORT and DFSORT's ICETOOL. DFSMSrmm ships these jobs in SYS1.SAMPLIB. Some of these reports use DFSORT symbols. See Chapter 6, "Using DFSMSrmm with DFSORT", on page 113 for information about using DFSORT and DFSORT's ICETOOL.

You use the DFSMSrmm extract data set as input to many of the sample reports. See the *z/OS DFSMSrmm Implementation and Customization Guide* for information about creating the extract data set as part of DFSMSrmm inventory management processing. See "Using the Extract Data Set" on page 42 for information about using the extract data set.

Table 10 shows the DFSMSrmm-supplied reports you can use. DFSMSrmm ships the sample JCL to produce the reports in SYS1.PARMLIB.

Table 10. DFSMSrmm-Supplied Reports

Report	Description
EDGJAUDM	Use EDGJAUDM to create a monthly archive from weekly audit reports.
EDGJAUDW	Use EDGJAUDW to create a weekly archive from daily audit reports.
EDGJBCAV	Use EDGJBCAV to create RMM ADDVOLUME subcommands from a list of barcode scanned volumes,
EDGJCOMB	Use EDGJCOMB to perform an audit of the tape library using a list of barcode scanned volumes.
EDGJCVB	Use EDGJCVB to create RMM CHANGEVOLUME subcommands for volumes in storage locations that can be used as input to other jobs.
EDGJDSN	Use EDGJDSN to create a report of data sets sorted by data set name.
EDGJNSCR	Use EDGJNSCR to create a report of volumes that have returned to scratch status.
EDGJRACK	Use EDGJRACK to create a report of rack prefixes.
EDGJRECL	Use EDGJRECL to create a report of lost volumes that can be used as input to the EDGJRECV job.
EDGJRECV	Use EDGJRECV to recover lost volumes.
EDGJROWN	Use EDGJROWN to Create a report of owners sorted by name and by department number.
EDGJRVOL	Use EDGJRVOL to create a report of volumes sorted by volume serial number, by rack number, by security level, by owner, and by expiration date.
EDGJSMF	Use EDGJSMF to create a summary of volumes contained in DFSMSrmm SMFAUD SMF records.
EDGJSMFP	Use EDGJSMFP to create a list of SMF records.
EDGJVLT	Use EDGJVLT to create a report of volumes currently in storage locations sorted by volume serial number.
EDGJVLTM	Use EDGJVLTM to create a report of volumes moving to storage locations.
EDGJVOL	Use EDGJVOL to create a report of volumes sorted by volume serial number.

See “Using DFSORT’s ICETOOL” on page 113 for information about customizing the sample jobs.

Creating Monthly Archives from Weekly Audit Reports

EDGJAUDM produces audit data that is sorted by volume and then by date so that you can trace actions against a volume from tape creation until tape deletion.

Remember to create the 12 GDGs for the monthly consolidation report. EDGJAUDW archives daily reports into a weekly archive. See “Creating Weekly Archives from Daily Audit Reports” on page 128 for information about the EDGJAUDW sample report. Audit data is not saved more than one year.

The sample produces an archive rather than a report which means that the report contains data but does not include header information.

Run EDGJAUDM once a month.

EDGJAUDM Input and Output

EDGJAUDM input and output is as follows:

Input:

The input for EDGJAUDM is SORTIN DD CARD, which contains weekly audit reports.

Output:

The output for EDGJAUDM is:

- SORTOUT DD CARD, which contains monthly audit reports that are sorted by volumes.
- SORTOUT DD CARD, which contains monthly audit reports that are sorted by rack number.
- SORTOUT DD CARD, which contains monthly audit reports that are sorted by user ID.

EDGJAUDM Customization

Use the following information to customize the EDGJAUDM sample job:

VSORT SORTIN

Change the data set names specified on the DSN keywords to those that are used on your system. The sample JCL assumes that you are using the files created by the sample job EDGJAUDW. EDGJAUDW creates a new generation of a GDG each week. Change the data sets to use the same names as used in EDGJAUDW.

VSORT SORTOUT

This file identifies the file where you want to store volume information for a single month of data. You can change the data set name as required by your installation. To keep data for one year, define a GDG with LIMIT(12) and specify the data set name in the JCL.

VSORT SYSIN

No customization should be necessary. Customize the SORT statement to sort the records by other than volume, date, and time.

The INCLUDE statement is specifically set to process the reports as produced by the sample EDGJAUDW job. If you changed the format or headings on the reports, change the INCLUDE statement here as well.

RSORT

The same customization can be performed as described for the VSORT step. In this step, the sample processes rack records.

USORT

The same customization can be performed as described for the VSORT step. In this step, the sample processes user IDs.

EDGJAUDM Examples

You can use EDGJAUDM to produce audit reports, as shown in Figure 114, Figure 115, and Figure 116 on page 128.

Figure 114 is an audit report that is sorted by volume. The column layout is the same as the layout of the corresponding weekly report, as shown in “Creating Weekly Archives from Daily Audit Reports” on page 128.

111001	111001	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE
111002	111002	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE
111004	111004	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	18/11/1995	U	VITAL	SHELF
111008	111008	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	06/12/1994	U	VITAL	SHELF
111009	111009	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	19/11/1995	U	VITAL	REMOTE
111015	111015	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	21/05/1993	U	VITAL	SHELF
111016	111016	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	29/08/1995	U	VITAL	SHELF
111017	111017	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	30/11/1994	U	VITAL	SHELF
111018	111018	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	22/10/1995	U	VITAL	SHELF
111019	111019	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE
111020	111020	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	14/03/1995	U	VITAL	SHELF
111021	111021	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE

Figure 114. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by Volume

Figure 115 is an audit report that is sorted by rack number. The column layout is the same as the layout of the corresponding weekly report as shown in “Creating Weekly Archives from Daily Audit Reports” on page 128.

000001	111001	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE
000002	111019	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE
000003	111137	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:44	E4E4	26/11/1995	U	VITAL	REMOTE
000004	111021	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE
000005	111023	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:35	E4E4	25/06/1994	U	VITAL	REMOTE
000006	111036	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:35	E4E4	25/06/1994	U	VITAL	REMOTE
000007	111044	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:35	E4E4	25/06/1994	U	VITAL	REMOTE
000008	111050	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:36	E4E4	25/06/1994	U	VITAL	REMOTE
000009	111051	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:36	E4E4	25/06/1994	U	VITAL	REMOTE
000010	111066	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:37	E4E4	25/06/1994	U	VITAL	REMOTE
000011	111139	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:44	E4E4	26/11/1995	U	VITAL	REMOTE
000012	111140	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:44	E4E4	26/11/1995	U	VITAL	REMOTE

Figure 115. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by Rack Number

Figure 116 on page 128 is an audit report that is sorted by user ID. The column layout is the same as the layout of the corresponding weekly report as shown in “Creating Weekly Archives from Daily Audit Reports” on page 128.

*HKP	111001	111001	UPDATE	RDRHSME	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE
*HKP	111002	111002	UPDATE	RDRHSME	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE
*HKP	111004	111004	UPDATE	RDROPCA	26/11/1995	01:00:32	E4E4	18/11/1995	U	VITAL	SHELF
*HKP	111008	111008	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	06/12/1994	U	VITAL	SHELF
*HKP	111009	111009	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	19/11/1995	U	VITAL	REMOTE
*HKP	111015	111015	UPDATE	RDROPCA	26/11/1995	01:00:33	E4E4	21/05/1993	U	VITAL	SHELF
*HKP	111016	111016	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	29/08/1995	U	VITAL	SHELF
*HKP	111017	111017	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	30/11/1994	U	VITAL	SHELF
*HKP	111018	111018	UPDATE	RDRHSME	26/11/1995	01:00:34	E4E4	22/10/1995	U	VITAL	SHELF
*HKP	111019	111019	UPDATE	RDROPCA	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE
*HKP	111020	111020	UPDATE	RDRHSME	26/11/1995	01:00:34	E4E4	14/03/1995	U	VITAL	SHELF
*HKP	111021	111021	UPDATE	RDROPCA	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE

Figure 116. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by User ID

Creating Weekly Archives from Daily Audit Reports

EDGJAUDW produces daily audit reports that use the DFSMSrmm EDGAUD report utility with the AUDREPT DD statement to process the SMFAUD SMF records for the day. See “Using EDGAUD to Create Security and Audit Reports” on page 72 for information about the DFSMSrmm EDGAUD report utility. Audit data is sorted by volume and then by date so that actions against a volume can be traced from tape creation until tape deletion. Remember to create the three GDGs for the weekly consolidation report. EDGJAUDM archives weekly reports into a monthly archive. Weekly archive data is kept for one month.

Run EDGJAUDW once a week.

EDGJAUDW Input and Output

EDGJAUDW input and output is as follows:

Input:

The input for EDGJAUDW is COLLECT DD CARD, which contains daily audit reports.

Output:

The output for EDGJAUDW is:

- VREPT DD CARD, which contains weekly audit records that are sorted by volumes.
- RREPT DD CARD, which contains weekly audit records that are sorted by rack number.
- UREPT DD CARD, which contains weekly audit records that are sorted by user ID.

EDGJAUDW Customization

Use the following information to customize the EDGJAUDW sample job:

TOOLIN

You should not need to customize the statements in the TOOLIN file. To use a different format for the weekly archived reports, you can modify the DISPLAY statement keywords and values to produce a different format. If you change the report format, you must also modify the statements in the EDGJAUDM job as they are dependent on report column positions as defined in the EDGJAUDW sample job.

COLLECT

This file identifies the data sets that contain the EDGAUD AUDREPT report

produced during the week. Run EDGAUD each day and create a generation of this data set. Create the GDG with LIMIT(7) if you run EDGAUD every day. You can change the data set name as required by your installation.

VREPT

This file identifies the data set for volume information for a single week of data. You can change the data set name as required by your installation. To keep data for 4 weeks, define a GDG with LIMIT(4) and specify the data set name in the JCL. You must also use the data set name in the EDGJAUDM job if you are using EDGJAUDM.

RREPT

This file identifies the data set for rack and bin information for a single week of data. You can change the data set name as required by your installation. To keep data for 4 weeks, define a GDG with LIMIT(4) and specify the data set name in the JCL. You must also use the data set name in the EDGJAUDM job if you are using EDGJAUDM.

UREPT

This file identifies the data set for user information for a single week of data. You can change the data set name as required by your installation. To keep data for 4 weeks, define a GDG with LIMIT(4) and specify the data set name in the JCL. You must also use the data set name in the EDGJAUDM job if you are using EDGJAUDM.

EDGJAUDW Examples

See the reports that you can produce using the EDGJAUDW sample JCL in Figure 117, Figure 118 on page 130, and Figure 119 on page 131.

Figure 117 is sorted by volume serial number and date. The sample report includes all SMF audit records for the week.

```
DFSMSrmm - Volume Audit Report Consolidation      11/27/95      17:56:44      - 1 -
```

VOLUME	RACK-#	OWNER	ACTIVITY	USERID	DATE	TIME	SYS	EXP-DATE	SEC	STATUS	LOCATION	LOAN-LOC
111001	111001	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE	
111002	111002	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE	
111004	111004	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:32	E4E4	18/11/1995	U	VITAL	SHELF	
111008	111008	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	06/12/1994	U	VITAL	SHELF	
111009	111009	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	19/11/1995	U	VITAL	REMOTE	
111015	111015	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	21/05/1993	U	VITAL	SHELF	
111016	111016	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	29/08/1995	U	VITAL	SHELF	
111017	111017	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:33	E4E4	30/11/1994	U	VITAL	SHELF	
111018	111018	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	22/10/1995	U	VITAL	SHELF	
111019	111019	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE	
111020	111020	RDRHSME	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	14/03/1995	U	VITAL	SHELF	
111021	111021	RDROPCA	UPDATE	*HKP	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE	

Figure 117. EDGJAUDW: Sample Report of a Weekly Audit Report Sorted by Volume

The data columns are:

VOLUME

The Volume serial number (VOLSER).

Rack-#

The rack number, which is the identifier that corresponds to a specific volume's shelf location.

OWNER

The user ID of the volume owner.

ACTIVITY

The action that was the cause for this record. ACTIVITY can be: CREATE, DELETE, or UPDATE.

USERID

User ID of the person who caused the last change.

DATE

The last change date.

TIME

The last change time.

SYS

The system ID of the system where the last change occurred.

EXP-DATE

The date that the volume should be considered for release.

SEC

The security classification level.

STATUS

The status of the volume, which can be one of the following:

- VITAL
- SCRATCH
- LOAN
- OPEN
- MASTER
- USER

LOCATION

The name of the volume's location.

LOAN.LOC

The loan location, which is the location of the volume if it is on loan.

Figure 118 is sorted by rack number and date. The report includes all the SMF audit records for the week.

```

DFSMSrmm - Rack Audit Report Consolidation      11/27/95      17:56:52      - 1 -
RACK/BIN VOLUME  OWNER  ACTIVITY  USERID  DATE      TIME      SYS      EXP-DATE SEC  STATUS LOCATION  LOAN-L
-----
000001  111001  RDRHSME  UPDATE  *HKP     26/11/1995 01:00:32 E4E4    19/11/1995 U  VITAL  REMOTE
000002  111019  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:34 E4E4    25/06/1994 U  VITAL  REMOTE
000003  111137  RDRHSME  UPDATE  *HKP     26/11/1995 01:00:44 E4E4    26/11/1995 U  VITAL  REMOTE
000004  111021  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:34 E4E4    25/06/1994 U  VITAL  REMOTE
000005  111023  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:35 E4E4    25/06/1994 U  VITAL  REMOTE
000006  111036  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:35 E4E4    25/06/1994 U  VITAL  REMOTE
000007  111044  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:35 E4E4    25/06/1994 U  VITAL  REMOTE
000008  111050  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:36 E4E4    25/06/1994 U  VITAL  REMOTE
000009  111051  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:36 E4E4    25/06/1994 U  VITAL  REMOTE
000010  111066  RDROPCA  UPDATE  *HKP     26/11/1995 01:00:37 E4E4    25/06/1994 U  VITAL  REMOTE
000011  111139  RDRHSME  UPDATE  *HKP     26/11/1995 01:00:44 E4E4    26/11/1995 U  VITAL  REMOTE
000012  111140  RDRHSME  UPDATE  *HKP     26/11/1995 01:00:44 E4E4    26/11/1995 U  VITAL  REMOTE

```

Figure 118. EDGJAUDW: Sample Report of a Weekly Audit Report Sorted by Rack Number

In addition to the data columns that are described in Figure 117 on page 129, this sample report includes an additional data column:

RACK or BIN

The rack number, which is the identifier that corresponds to a specific volume's shelf location.

Figure 119 is sorted by user ID and date and time. The report includes all the SMF audit records for the day. See Figure 117 on page 129 for the description of the data columns that are used in this report.

```
DFSMsrm - User Audit Report Consolidation      11/27/95      17:56:57      - 1 -
```

USERID	VOLUME	RACK-#	ACTIVITY	OWNER	DATE	TIME	SYS	EXP-DATE	SEC	STATUS	LOCATION	LOAN-LOC
*HKP	111001	111001	UPDATE	RDRHSME	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE	
*HKP	111002	111002	UPDATE	RDRHSME	26/11/1995	01:00:32	E4E4	19/11/1995	U	VITAL	REMOTE	
*HKP	111004	111004	UPDATE	RDROPCA	26/11/1995	01:00:32	E4E4	18/11/1995	U	VITAL	SHELF	
*HKP	111008	111008	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	06/12/1994	U	VITAL	SHELF	
*HKP	111009	111009	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	19/11/1995	U	VITAL	REMOTE	
*HKP	111015	111015	UPDATE	RDROPCA	26/11/1995	01:00:33	E4E4	21/05/1993	U	VITAL	SHELF	
*HKP	111016	111016	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	29/08/1995	U	VITAL	SHELF	
*HKP	111017	111017	UPDATE	RDRHSME	26/11/1995	01:00:33	E4E4	30/11/1994	U	VITAL	SHELF	
*HKP	111018	111018	UPDATE	RDRHSME	26/11/1995	01:00:34	E4E4	22/10/1995	U	VITAL	SHELF	
*HKP	111019	111019	UPDATE	RDROPCA	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE	
*HKP	111020	111020	UPDATE	RDRHSME	26/11/1995	01:00:34	E4E4	14/03/1995	U	VITAL	SHELF	
*HKP	111021	111021	UPDATE	RDROPCA	26/11/1995	01:00:34	E4E4	25/06/1994	U	VITAL	REMOTE	

Figure 119. EDGJAUDW: Sample Report of a Weekly Audit Report Sorted by Userid

Creating RMM Subcommands of Barcode Scanned Volumes

EDGJBCAV creates RMM ADDVOLUME subcommands from a list of barcode scanned volumes. Update the TEMPCNTL DD CARD with the format of the barcode scanner and any information that is needed in the RMM ADDVOLUME subcommand. Refer to *z/OS DFSMSrmm Guide and Reference* for the description of the RMM ADDVOLUME subcommand.

EDGJBCAV Input and Output

EDGJBCAV input and output is as follows:

Input:

The input for EDGJBCAV is BARCODE DD CARD, which is a list of barcode scanned volumes.

Output:

The output for EDGJBCAV is RMMCMD DD CARD, which contains RMM ADDVOLUME subcommands.

EDGJBCAV Customization

Use the following information to customize the EDGJBCAV sample job:

BARCODE

This file identifies the data set that contains the list of volume serial numbers scanned using a barcode reader. The format of the file can vary depending on the barcode software you use. The sample job assumes that the records are RECFM=V or RECFM=VB, and that the first three characters in each record are IBM. The volume serial number starts in column 5. If the files created from the barcode reader are a different format when sent to the host system, you must customize the TEMPCNTL file statements. See Figure 120 on page 132 for a sample of the input for the job.

Set the data set name to the correct data set name.

RMMCMD

This is the commands file created by ICETOOL processing. Update the data set name to meet your requirements. If you change the name, remember to also change the data set name on the CLEAN step SYSIN file.

TEMPCNTL

This file contains statements that control ICETOOL processing.

The INCLUDE statement ensures that the input records from the barcode reader are the correct format. Use the OUTREC statement to build the RMM subcommands. This sample is building RMM ADDVOLUME subcommands to add volumes to DFSMSrmm in USER status. You can customize this statement to build any other subcommands you want.

EDGJBCAV Examples

Figure 120 shows a sample of the input for EDGJBCAV.

```
IBM 111000  
IBM 111100  
IBM 111010  
IBM 111001
```

Figure 120. EDGJBCAV: Sample Input of Barcode-Scanned Volumes

Figure 121 shows a sample of the output for EDGJBCAV. Refer to *z/OS DFSMSrmm Guide and Reference* for the description of the RMM ADDVOLUME subcommand.

```
RMM ADDVOLUME 111000 STATUS(USER) RETPD(30)  
RMM ADDVOLUME 111100 STATUS(USER) RETPD(30)  
RMM ADDVOLUME 111010 STATUS(USER) RETPD(30)  
RMM ADDVOLUME 111001 STATUS(USER) RETPD(30)
```

Figure 121. EDGJBCAV: Sample Output of RMM ADDVOLUME Subcommands from Barcode Scanned Volumes

Auditing the Tape Library Audit Using a Barcode Scanner

EDGJCOMB compares barcode scanned inventory with the DFSMSrmm extract data set and lists volumes in both the library and the extract data set, volumes in the library only, and volumes in the extract data set only.

EDGJCOMB Input and Output

EDGJCOMB input and output is as follows:

Input:

The input for EDGJCOMB is:

- EXTRACT DD CARD, which is the DFSMSrmm extract data set.
- BARCODE DD CARD, which contains scanned barcodes.

Output:

The output for EDGJCOMB is:

- MATCHED DD CARD, which contains volumes that are in the library and the extract data set.
- LIBONLY DD CARD, which contains volumes that are in the library only.

- RMMONLY DD CARD, which contains volumes that are in the extract data set only.

EDGJCOMB Customization

Use the following information to customize the EDGJCOMB sample job:

BARCODE

This file identifies the data set that contains the list of volume serial numbers scanned using a barcode reader. The format of the file can vary depending on the barcode software you use. The sample job assumes that the records are RECFM=V or RECFM=VB, and that the first three characters in each record are IBM. The volume serial number starts in column 5. If the files created from the barcode reader are a different format when sent to the host system, you must customize the BARCNTL file statements. See Figure 120 on page 132 for a sample of the input for the job.

Set the data set name to the correct data set name.

EXTRACT

This is the DFSMSrmm extract data set. Set the data set name to the extract data set that is used on your system.

BARCNTL

This file contains statements that control ICETOOL processing.

The INCLUDE statement ensures that the input records from the barcode reader are the correct format. The OUTREC statement builds a record that contains the volume serial number in column 1. Customize the statements to support the record format produced from your barcode reader.

EXTRCNTL

This file contains statements that control ICETOOL processing.

The INCLUDE statement ensures that only volume records from the extract data set are selected. The OUTREC statement builds a record that contains the rack number in column 1. You should not need to customize this information.

EDGJCOMB Examples

Figure 122 shows a sample report of volumes that are found only in the extract data set.

```
EM0000
EM0001
EM0002
```

Figure 122. EDGJCOMB: Sample List of Volumes Found in the Extract Data Set Only

Figure 123 shows a sample report of volumes that are found only in the library.

```
WOODYD
```

Figure 123. EDGJCOMB: Sample List of Volumes in the Location Library Only

Figure 124 on page 134 shows a sample report of volumes that are found in both the library and the extract data set.

```
111000
111001
111002
111003
111010
```

Figure 124. EDGJCOMB: Sample List of Volumes in the Library and the Extract Data Set

Creating RMM CHANGEVOLUME Subcommands for Volumes in Storage Locations

EDGJCVB reads the DFSMSrmm extract data set and builds a file that contains RMM CHANGEVOLUME subcommands for LOCAL REMOTE, and DISTANT storage locations and a report of the number of volumes by location.

For the description of the RMM CHANGEVOLUME subcommand, refer to the *z/OS DFSMSrmm Implementation and Customization Guide*.

EDGJCVB Input and Output

EDGJCVB input and output is as follows:

Input:

The input for EDGJCVB is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJCVB is:

- RMMCVB DD CARD, which contains RMM CHANGEVOLUME subcommands.
- RMMCVBS DD CARD, which contains the number of volume by location.

To select the location names to use, you can edit the SORT INCLUDE statement for field name RVSTORID.

EDGJCVB Customization

Use the following information to customize the EDGJCVB sample job:

VOLSCNTL

The sample job selects all volumes in the built-in storage locations, LOCAL, REMOTE, or DISTANT. To select volumes in other locations, you must update the INCLUDE statement to specify the location names to be selected. If you want to select volumes based on criteria other than the location, you can tailor the INCLUDE statement.

VOLFCNTL

VOLFCNTL contains two sort statements. The SORT statement ensures that the records are produced in the desired sequence and that the OUTREC statement is used to build the RMM subcommands. You can customize the sort statements if you want to use the job to provide a different subcommand.

EDGJCVB Examples

Figure 125 on page 135 shows a sample report that lists the volume in all storage locations.


```

RMM CHANGEVOLUME A00007 LOCATION(DISTANT ) BIN(000001)
RMM CHANGEVOLUME A00008 LOCATION(DISTANT ) BIN(000002)
RMM CHANGEVOLUME A00009 LOCATION(DISTANT ) BIN(000003)
RMM CHANGEVOLUME A00004 LOCATION(LOCAL ) BIN(000001)
RMM CHANGEVOLUME A00005 LOCATION(LOCAL ) BIN(000002)
RMM CHANGEVOLUME A00006 LOCATION(LOCAL ) BIN(000003)
RMM CHANGEVOLUME A00010 LOCATION(REMOTE ) BIN(000001)
RMM CHANGEVOLUME A00011 LOCATION(REMOTE ) BIN(000002)
RMM CHANGEVOLUME A00012 LOCATION(REMOTE ) BIN(000003)

```

Figure 125. EDGJCVB: Sample Output of RMM CHANGEVOLUME Subcommands for Volumes in Storage Locations

Figure 126 shows a sample report of volumes by location and the number of each volume in each location.

```

DFSMSrmm - Volume Counts by Location      11/13/95      07:39:17      - 1 -

LOCATION          COUNT
-----
DISTANT          3
LOCAL            3
REMOTE           3

```

Figure 126. EDGJCVB: Sample Report of Volume Counts by Location

The data columns are:

LOCATION

The storage location names.

COUNT

The number of volumes by location.

Creating a Data Set Report Sorted by Data Set Name

EDGJDSN creates a report of data sets that are sorted by dataset name and the number of datasets per status (SCRATCH or PRIVAT).

EDGJDSN Input and Output

EDGJDSN input and output is as follows:

Input:

The input for EDGJDSN is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJDSN is:

- RMMDSN DD CARD, which contains data sets sorted by name.
- RMMDSNS DD CARD, which contains the number of data sets by status.

EDGJDSN Customization

Use the following information to customize the EDGJDSN sample job:

TOOLIN

You can customize the report produced by modifying the DISPLAY statement to change column headers and the field symbolic names to be used.

EDGJDSN Examples

Figure 127 shows a sample report of data sets that are sorted by data set name. The sample report includes all data sets.

```

DFSMSrmm - Data Sets Sorted by Name      11/08/95      02:21:20      - 1 -
DSNAME          VOLSER   DSEQ   VSEQ   CRDATE      MCLASS      VRSVAL      STATUS
-----
DISTANT.REPORT.DS007      A00007      1      1   1995/10/09      PRIVATE
DISTANT.REPORT.DS0081    A00008      1      1   1995/10/09      PRIVATE
DISTANT.REPORT.DS0082    A00008      2      1   1995/10/09      PRIVATE
DISTANT.REPORT.DS0091    A00009      1      1   1995/10/09      PRIVATE
DISTANT.REPORT.DS0092    A00009      2      1   1995/10/09      PRIVATE
DISTANT.REPORT.DS0093    A00009      3      1   1995/10/09      PRIVATE
ICETOOL.NSCR.TEST01      A00101      1      1   1995/10/11      SCRATCH
ICETOOL.NSCR.TEST01      A01001      1      1   1995/10/11      SCRATCH
ICETOOL.NSCR.TEST01      V00001      1      1   1995/10/11      SCRATCH
ICETOOL.NSCR.TEST01      A00101      1      1   1995/10/11      PRIVATE
ICETOOL.NSCR.TEST01      A01001      1      1   1995/10/11      PRIVATE
ICETOOL.NSCR.TEST01      V00001      1      1   1995/10/11      PRIVATE
ICETOOL.NSCR.TEST02      A00102      1      1   1995/10/11      SCRATCH
ICETOOL.NSCR.TEST02      A01002      1      1   1995/10/11      SCRATCH
ICETOOL.NSCR.TEST02      V00002      1      1   1995/10/11      SCRATCH
MV.MD.DS0192             A00020      1      2   1995/10/09      PRIVATE
MV.MD.DS0201             A00020      2      2   1995/10/09      PRIVATE

```

Figure 127. EDGJDSN: Sample Report of Data Sets Sorted by Name

The data columns are:

DSNAME

The name of the data set.

VOLSER

The volume serial number.

DSEQ

The data set sequence number on the volume.

VSEQ

The volume sequence number for this dataset.

CRDATE

The creation date of the data set.

MCLASS

The SMS management class.

VRSVAL

The vital record specification management value.

STATUS

Status of the data set, which can be one of the following:

- PRIVATE
- SCRATCH

Figure 128 on page 137 shows a sample report of data sets by status.

STATUS	COUNT
-----	-----
PRIVATE	11
SCRATCH	6

Figure 128. EDGJDSN: Sample Report of Data Set Counts by Status

The data columns are:

STATUS

The status of the data sets, which can be one of the following:

- PRIVATE
- SCRATCH

COUNT

The number of data sets by status

Creating a Report of Volumes Returned to Scratch

EDGJNSCR compares the current DFSMSrmm extract data set with an old DFSMSrmm extract data set and creates a report of new scratch volumes and the number of scratch volumes per media name.

EDGJNSCR Input and Output

EDGJNSCR input and output is as follows:

Input:

The input for EDGJNSCR is:

- EXTRACT DD CARD, which is the current DFSMSrmm extract data set.
- EXTOLD DD CARD, which is the old DFSMSrmm extract data set.

Output:

The output for EDGJNSCR is:

- RMMSR DD CARD, which contains volumes sorted by volume serial number.
- RMMSRCS DD CARD, which contains volume count by media name.

EDGJNSCR Customization

Use the following information to customize the EDGJNSCR sample job:

TOOLIN

You can change column headers and the record offsets by modifying the DISPLAY statement. The sample includes some commented statements for fields that you might want to include in your reports. You can include these fields as long as you remove others to stay within the ICETOOL record limit of 121 characters per report line.

VOLFCNTL

In some cases, to modify the report you must also modify the OUTREC statement in this file to include other fields within volume record in the DFSMSrmm extract data set. There is no limit to the size of the records built by the OUTREC statement, other than system limits.

EDGJNSCR Examples

Figure 129 is sorted by volume serial number and lists only new scratch volumes.

```

DFSMSrmm - New Scratch Volumes      12/11/95      15:08:16      - 1 -
-----
VOLSER  DSNAME                                SCR DATE  VSEQ  JCL EXPDT  STATUS  LOCATION  MEDIANM
-----
111977  CSSM.BACKUP.ALLSDSPS.G0299V00        11/12/1995  1    16/12/1995  SCRATCH  SHELF     TAPE
112052  CSSM.BACKUP.ALLSDSPS.G0297V00        07/12/1995  1    12/12/1995  SCRATCH  SHELF     3480
112094  DBDC.DUMP.V8SCI00.G0289V00          07/12/1995  1    22/12/1995  SCRATCH  SHELF     TAPE
112096  RHSM.BACKTAPE.DATASET                07/12/1995  1                                SCRATCH  SHELF     TAPE
112195  DBDC.DUMP.V8SCI00.G0289V00          07/12/1995  2    22/12/1995  SCRATCH  SHELF     TAPE
112198  CSSM.BACKUP.ALLSDSPS.G0298V00        09/12/1995  1    14/12/1995  SCRATCH  SHELF     3490
112251  DBDC.DUMP.V8SIM01.G0298V00          07/12/1995  1    22/12/1995  SCRATCH  SHELF     TAPE
112255  DBDC.DUMP.V8SIM01.G0298V00          07/12/1995  2    22/12/1995  SCRATCH  SHELF     TAPE
112270  RHSM.HMIGTAPE.DATASET                07/12/1995  1                                SCRATCH  SHELF     3480
112271  DBDC.DUMP.V8BASE3.G0043V00          07/12/1995  1    22/12/1995  SCRATCH  SHELF     3490
112291  DBDC.DUMP.V8BASE3.G0043V00          07/12/1995  2    22/12/1995  SCRATCH  SHELF     3490
  
```

Figure 129. EDGJNSCR: Sample Report of New Scratch Volumes

The data columns are:

VOLSER

The volume serial number.

DSNAME

The first file data set name.

SCR DATE

The scratch date, which is the date the volume was assigned to scratch status.

VSEQ

The volume sequence number.

JCL EXPDT

The original expiration date.

STATUS

The status of the volume.

LOCATION

The volume's current location.

MEDIANM

The media name, which is the value that describes the shape of the media.

Figure 130 shows a sample report of scratch volumes by media name.

```

DFSMSrmm - Number of New Scratch Volumes by Media      11/13/95      08:53:56      - 1 -
-----
MEDIANAME      COUNT
-----
VTAPE          6
3480           2
3490           3
  
```

Figure 130. EDGJNSCR: Sample Report of the Number of New Scratch Media by Media

The data columns are:

MEDIANAME

The media name, which is the value that describes the shape of the media.

COUNT

The number of volumes by media name.

Creating a Report of Rack Prefixes

EDGJRACK reads the DFSMSrmm extract data set and creates a report of rack prefixes.

EDGJRACK Input and Output

EDGJRACK input and output is as follows:

Input:

The input for EDGJRACK is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJRACK is RMMRACKP DD CARD, which contains rack number prefixes.

EDGJRACK Customization

Use the following information to customize the EDGJRACK sample job.

TOOLIN

The OCCUR statement creates a report of prefixes used for rack numbers. It assumes a three character prefix. If you want to report using a different prefix length, you can change the statement. For example, the following partial statement uses a two character prefix.

```
HEADER('RACK PREFIX')    ON(365,2,CH) -
```

EXTRCNTL

To customize the fields used for reporting, you can change the INCLUDE and SORT statements. You also have to update the OCCUR statement in TOOLIN to match the field offset that you want to report on. The sample JCL shows additional commented-out fields that you might want to include in your reports. Use these fields to obtain reports on security classification, ownership, or volume prefix.

EDGJRACK Examples

Figure 131 shows a sample report of rack prefixes and the number of each rack prefix.

```
1DFSMSrmm - Rack Prefixes with Counts / Prefix      12/01/95      06:54:33      - 1 -

RACK PREFIX    NUMBER OF RACKS
-----
A00                35
A01                10
V00                10
1  TOTAL TAPES ALL PREFIXES
-- -----
                    55
```

Figure 131. EDGJRACK: Sample Report of Rack Prefixes with Volume Count

The data columns are:

RACK PREFIX

The first three digits of the rack number

NUMBER OF RACKS

The number of volumes that are assigned to racks starting with the prefix

Obtaining Information about Lost Volumes

EDGJRECL lists DFSMSrmm volume information for identified volumes for a recovery. EDGJRECL uses an old extract data set which contains all information on volumes no longer in the DFSMSrmm control data set.

Use the DFSMSrmm recovery jobs to recover small sets of volumes that are accidentally deleted where too much new data would be lost by recovering the entire control data set.

EDGJRECL Input and Output

EDGJRECL input and output is as follows:

Input:

The input for EDGJRECL is:

- IN1 DD CARD, which is a list of tape volumes to be recovered. IN1 contains a list of volume numbers with the volume Number starting in column 2.
- IN2 DD CARD, which is the old DFSMSrmm extract data set that contains information about volumes before they were deleted.

Output:

The output for EDGJRECL is FINAL DD CARD, which contains a list of DFSMSrmm volume information.

EDGJRECL Customization

Use the following information to customize the EDGJRECL sample job. This job builds a file containing most of the extract data set volume records. You can use the information to build RMM subcommands to add back the volumes.

EDGJRECL Examples

Figure 132 shows a sample report of lost volumes.

```
A00023          1995/10/10004452D65MVS6 1995/10/15*  N  2          0  0
A00024          1995/10/10004452D65MVS6 1995/10/15*  N  2          0  0
```

Figure 132. EDGJRECL: Sample Report of a List of Lost Volumes

The output starts with the volume serial number. The sequence of the columns corresponds to the extract data set volume record EDGRVEXT described in “Extract Data Set Volume Report Record: EDGRVEXT” on page 219.

Recovering Lost Volumes

EDGJRECV creates RMM ADDVOLUME subcommands to recover identified deleted volumes. EDGJRECV uses an old extract data set that contains all information on deleted volumes.

The DFSMSrmm recovery jobs are used to recover small sets of volumes that are accidentally deleted when too much new data would be lost by recovering the entire control data set.

If you have an extract data set created with a date format other than American date format, change the JCL for the format you use.

EDGJRECV Input and Output

EDGJRECV input and output is as follows:

Input:

The input for EDGJRECV is:

- IN1 DD CARD, which is the lost volume file. IN1 contains a list of the rack numbers for the volumes to be recovered. It must be a VB data set (CLIST). Rack numbers start in column 2.
- IN2 DD CARD, which is the old DFSMSrmm extract data set. IN2 contains information about volumes before they were lost. The extract data set uses American date format.

Output:

The output for EDGJRECV is COMMANDS DD CARD, which is a CLIST of RMM ADDVOLUME subcommands.

EDGJRECV Customization

Use the following information to customize the EDGJRECV sample job:

ASMAM35 SYSIN

This file is the sample E35FILL exit source code. It is used to perform special processing on some fields of the subcommands that are built. You can avoid using the E35FILL exit source code by removing the MODS statement in the CMDTCNTL file at the end of the sample job.

If you change the subcommand built by the STEP1 job step, you must also consider changing the E35FILL exit source code.

IN1

The file contains the rack numbers of the volumes to be recovered. The file must be variable length record format.

COMMANDS

After execution, the COMMANDS file contains the DFSMSrmm subcommands you can use to add the volumes back into the DFSMSrmm control data set. Review the subcommands that are built and edit them to specify any additional operands or values you want.

CMDTCNTL

This field contains a sort OUTREC statement that is used to build the RMM ADDVOLUME subcommands. It includes comments that describe the fields that are used and the processing that is performed on them. The sample assumes that the input records in the DFSMSrmm extract data set in file IN2 are generated using DATEFORM(A), which is American date format. If your extract data set uses a different date format you must customize the OUTREC statements. Use the commented statements that support ISO and European date formats in place of the default format. Both assigned date and expiration date are processed.

If you change the subcommand that is built, you also must change the E35FILL source code included in the sample. To prevent the E35FILL exit from being used, which is often useful when you are testing updated code, comment out the sort MODS statement.

EDGJRECV Examples

Figure 133 shows a sample of the RMM ADDVOLUME subcommands that are produced by this report. You can use the subcommand output in jobs to add the lost volumes back into the DFSMSrmm control data set. See *z/OS DFSMSrmm Guide and Reference* for information about the RMM ADDVOLUME subcommand and the operands you can specify with the subcommand.

```

RMM ADDVOLUME 111000 STATUS(MASTER ) RACK(111000) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS ) ASDATE(1995/015) ASTIME(200126)
  RELEASEACTION(SCRATCH ) EXPDT(1995/071)
  OWNERACCESS(ALTER ) SECLEVEL(U ) OWNER(RDRHSME )
  DESCRIPTION(' ')
  ACCOUNT(' ')
RMM ADDVOLUME 111001 STATUS(SCRATCH ) RACK(111001) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS )
  RELEASEACTION(SCRATCH )
RMM ADDVOLUME 111002 STATUS(SCRATCH ) RACK(111002) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS )
  RELEASEACTION(SCRATCH )
RMM ADDVOLUME 111003 STATUS(MASTER ) RACK(111003) UNIT(TAPE ) LABEL(SL )
  DENSITY(3480) USE(MVS ) ASDATE(1995/655) ASTIME(180754)
  RELEASEACTION(SCRATCH ) EXPDT(1996/005)
  OWNERACCESS(ALTER ) SECLEVEL(U ) OWNER(SMFADM )
  DESCRIPTION(' ')
  ACCOUNT('TSG,E1C,M4031MA ')
RMM ADDVOLUME 111010 STATUS(MASTER ) RACK(111010) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS ) ASDATE(1995/015) ASTIME(050143)
  RELEASEACTION(SCRATCH ) EXPDT(1995/071)
  OWNERACCESS(ALTER ) SECLEVEL(U ) OWNER(RDRHSME )
  DESCRIPTION(' ')
  ACCOUNT(' ')
RMM ADDVOLUME 111020 STATUS(MASTER ) RACK(111020) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS ) ASDATE(1995/246) ASTIME(100935)
  RELEASEACTION(RETURN REPLACE ) EXPDT(1995/647)
  OWNERACCESS(ALTER ) SECLEVEL(U ) OWNER(RDRHSME )
  DESCRIPTION(' ')
  ACCOUNT(' ')
RMM ADDVOLUME 111030 STATUS(SCRATCH ) RACK(111030) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS )
  RELEASEACTION(SCRATCH )
RMM ADDVOLUME 111100 STATUS(SCRATCH ) RACK(111100) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS )
  RELEASEACTION(SCRATCH )
RMM ADDVOLUME 111200 STATUS(SCRATCH ) RACK(111200) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS )
  RELEASEACTION(SCRATCH )
RMM ADDVOLUME 111300 STATUS(MASTER ) RACK(111300) UNIT(TAPE ) LABEL(SL )
  DENSITY(IDRC) USE(MVS ) ASDATE(1995/185) ASTIME(211111)
  RELEASEACTION(SCRATCH ) EXPDT(1995/132)
  OWNERACCESS(ALTER ) SECLEVEL(U ) OWNER(RDROPCA )
  DESCRIPTION(' ')
  ACCOUNT('TSG,E1C,M4031MC ')

```

Figure 133. EDGJRECV: Sample list of RMM ADDVOLUME Subcommands for Lost Volumes

Creating Reports on Owners Sorted by Name and by Department

EDGJROWN reads the DFSMSrmm extract data set and creates a report of owners that is sorted by name and a report that is sorted by department number.

EDGJROWN Input and Output

EDGJROWN input and output is as follows:

Input:

The input for EDGJROWN is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJROWN is:

- OWNNAME DD CARD, which contains owners by name.
- OWNDEPT DD CARD, which contains owners by department.

EDGJROWN Customization

Use the following information to customize the EDGJROWN sample job:

TOOLIN

The sample job produced several reports: one report that lists all owners sorted by last name and one report that lists all owners sorted by department name.

You can customize your own owner reports by changing the layout of the report defined in the sort DISPLAY statement. Select the fields you want to include in the report and place them in the correct order. To produce reports with records in a different sequence you have to customize the SORT statement included in the OWNNCNTL and OWNDCNTL files.

EDGJROWN Examples

Figure 134 is sorted by last name and includes all volume owners.

```
DFSMSrmm - Owners Listed by Last Name      12/13/95      00:05:52      - 1 -
```

LAST NAME	FIRST NAME	OWNER-ID	NODE	USERID	TIELINE	DEPT	# OF TAPES
Chin	Benny	BKCHIN	STLVM4	BKCHIN		W98	0
Dile	Mike	DILE	MVSNET	DILE	294-0897	W98	15
DFHSM	Storage Ad	HSM250	MVSNET	DILE	294-0897	w93	0
Etz	Arnd	D041044	MAZVM01	ETZ	2966	4193 - SM	0
Gary	Coleman	COLEMAN	SJSVM28	GCOLEMAN	12345	w95	0
Gohr	Bernd	D044412	MAZVM02	GOHR	3147	4193	5
Kuehn	Werner	D094746	MAZVM01	WKUEHN	2116	4193	29
Streu	Ullfried	D090667	MAZVM02	USTREU	6418	4193	0
TOTAL TAPES							49

Figure 134. EDGJROWN: Sample Report of Owners Listed by Last Name

The data columns are:

LAST NAME

The last name of the owner.

FIRST NAME

The first name of the owner.

OWNER-ID

The user ID of the owner.

NODE

The node name of the owner's electronic mail address.

USERID

The user ID of the owner's electronic mail address.

TIELINE

The internal phone number of the owner.

DEPT

The department ID of the owner.

OF TAPES

The number of tapes that are owned by the person who is identified by the owner ID.

Figure 135 shows a sample report of tape volume owners.

The data columns for these reports are the same as the Owners Listed by Last Name report, as shown in Figure 136 on page 145.

```

1DFSMSrmm - Owners Listed by Department      12/13/95      00:06:12      - 1 -

```

LAST NAME	FIRST NAME	OWNER-ID	NODE	USERID	TIELINE	DEPT	# OF TAPES
DFHSM	Storage Ad	HSM250	MVSNET	DILE	294-0897	w93	0
Gary	Coleman	COLEMAN	SJSVM28	GCOLEMAN	12345	w95	0
Chin	Benny	BKCHIN	STLVM4	BKCHIN		w98	0
Dile	Mike	DILE	MVSNET	DILE	294-0897	w98	15
Gohr	Bernd	D044412	MAZVM02	GOHR	3147	4193	5
Streu	Ullfried	D090667	MAZVM02	USTREU	6418	4193	0
Kuehn	Werner	D094746	MAZVM01	WKUEHN	2116	4193	29
Etz	Arnd	D041044	MAZVM01	ETZ	2966	4193 - SM	0
TOTAL TAPES							49

Figure 135. EDGJROWN: Sample Report of Owners Listed by Department

Creating Volume Reports

EDGJRVOL reads the DFSMSrmm extract data set and creates reports of volumes, which are sorted by several criteria.

EDGJRVOL Input and Output

EDGJRVOL input and output is as follows:

Input:

The input for EDGJRVOL is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJRVOL is:

- VOLNAME DD CARD, which contains volumes sorted by volume serial.
- VOLRACK DD CARD, which contains volumes sorted by rack number.
- VOLCLAS DD CARD, which contains volumes sorted by security level.
- VOLOWN DD CARD, which contains volumes sorted by owner.
- VOLEXP DD CARD, which contains volumes sorted by expiration date.

EDGJRVOL Customization

Use the following information to customize the EDGJRVOL sample job:

TOOLIN

The sample job produces multiple reports about volumes. Each report is sorted into a different sequence based on the field used as the primary report purpose.

You can customize your own owner reports by changing the layout of the report defined in the sort DISPLAY statement. Select the fields you want to include in the report and place them in the correct order. To produce reports with records in a different sequence you have to customize the SORT statement included in the corresponding VOLxCNTL files.

VOLECNTL

The sample JCL requires the American date format for the expiration date. If the expiration date has another format, change the corresponding SORT FIELDS statement. The sample job contains suitable SORT statements for other date formats as comments.

EDGJRVOL Examples

Figure 136 is sorted by volume name and includes all volumes.

```
DFSMSrmm - Volumes Sorted by Volume Serial      11/14/95      03:11:40      - 1 -  
  
VOLUME  RACK-#  OWNER-ID  EXPIRATION  SEC  UNIT  STATUS  DESCRIPTION  ACCOUNT-DATA  
-----  -  
A00001  A00001  D041044  10/14/1995  VTAP 3480 MASTER  
A00002  A00002  D041044  10/14/1995  VTAP 3480 MASTER  
A00003  A00003  D041044  10/14/1995  VTAP 3480 MASTER  
A00004  A00004  D041044  10/14/1995  VTAP 3480 MASTER  
A00005  A00005  D041044  10/14/1995  VTAP 3480 MASTER  
..  
A01001  A01001                VTAP 3490 SCRATCH  
A01002  A01002                VTAP 3490 SCRATCH  
A01003  A01003                VTAP 3490 SCRATCH  
A01004  A01004                VTAP 3490 SCRATCH
```

Figure 136. EDGJRVOL: Sample Report of Volumes Sorted by Volume Serial Number

The data columns are:

VOLUME

The volume serial number.

RACK-#

The rack number, which is the identifier that corresponds to a specific volume's shelf location.

OWNER-ID

The user ID of the owner.

EXPIRATION

The expiration date.

SEC

The security class level.

UNIT

The media name, which is the value that describes the shape of the media.

STATUS

The status of the volume, which can be one of the following:

- MASTER
- SCRATCH
- USER

- INIT
- ENTRY

DESCRIPTION

A free input field for additional information.

ACCOUNT-DATA

Accounting data from JCL.

Figure 137 shows a sample report of volumes that are sorted by rack number. The data columns for this report are the same as the Volumes Sorted by Volume Serial report, as shown in Figure 136 on page 145.

```

DFSMSrmm - Volumes Sorted by Rack number      11/14/95      03:11:41      - 1 -
VOLUME  RACK-#  OWNER-ID  EXPIRATION  SEC  UNIT  STATUS  DESCRIPTION  ACCOUNT-DATA
-----  -
A00001  A00001  D041044  10/14/1995  TMS  3480  MASTER
A00002  A00002  D041044  10/14/1995  TMS  3480  MASTER
A00003  A00003  D041044  06/30/1996  TMS  3480  MASTER
A00004  A00004  D041044  06/30/1995  VTAP  3480  MASTER
A00005  A00005  D041044  04/30/2000  VTAP  3480  MASTER
A00006  A00006  D041044  04/30/2000  VTAP  3480  MASTER

```

Figure 137. EDGJRVOL: Sample Report of Volumes Sorted by Rack Number

Figure 138 shows a sample report of volumes that are sorted by security level.

The data columns for this report are the same as the Volumes Sorted by Volume Serial report, as shown in Figure 136 on page 145.

```

DFSMSrmm - Volumes Sorted by Security Level    11/14/95      03:11:43      - 1 -
VOLUME  RACK-#  OWNER-ID  EXPIRATION  SEC  UNIT  STATUS  DESCRIPTION  ACCOUNT-DATA
-----  -
A00106  A00106  D041044  03/30/1997  TMS  3480  MASTER
A00107  A00107  D041044  03/30/1997  TMS  3480  MASTER
A00108  A00108  D041044  08/30/1998  TMS  3480  MASTER
A00109  A00109  D041044  02/15/1996  VTAP  3480  MASTER
A00110  A00110  D041044  02/15/1996  VTAP  3480  MASTER
A01006  A01006  D041044  05/30/2000  VTAP  3490  MASTER

```

Figure 138. EDGJRVOL: Sample Report of Volumes Sorted by Security Level

Figure 139 on page 147 shows a sample report of volumes that are sorted by owner.

The data columns for this report are the same as the Volumes Sorted by Volume Serial report, as shown in Figure 136 on page 145.

```

DFSMSrmm - Volumes Sorted by Owner          11/14/95      03:11:45      - 1 -
VOLUME  RACK-#  OWNER-ID  EXPIRATION  SEC  UNIT  STATUS  DESCRIPTION  ACCOUNT-DATA
-----  -
A00301  A00301  D041044  10/14/1995  VTAP 3480  MASTER
A00302  A00302  D041044  10/14/1995  VTAP 3480  MASTER
A00303  A00303  D041044  06/30/1996  VTAP 3480  MASTER
A00304  A00304  D043024  06/30/1996  VTAP 3480  MASTER
A00305  A00305  D043024  04/30/2000  VTAP 3480  MASTER
A00306  A00306  D043024  04/30/2000  VTAP 3480  MASTER
A00307  A00307  D043024  05/30/2000  VTAP 3480  MASTER
A00308  A00308  D051133  05/30/2000  VTAP 3480  MASTER
A00309  A00309  D051133  10/14/1995  VTAP 3480  MASTER

```

Figure 139. EDGJRVOL: Sample Report of Volumes Sorted by Owner

Figure 140 shows a sample report of volumes that are sorted by expiration date.

The data columns for this report are the same as the Volumes Sorted by Volume Serial report, as shown in Figure 136 on page 145.

```

DFSMSrmm - Volumes Sorted by Expiration Date  11/14/95      03:11:47      - 1 -
VOLUME  RACK-#  OWNER-ID  EXPIRATION  SEC  UNIT  STATUS  DESCRIPTION  ACCOUNT-DATA
-----  -
A00401  A00401  D041044  10/14/1995  VTAP 3480  MASTER
A00402  A00402  D041044  10/14/1995  VTAP 3480  MASTER
A00403  A00403  D041044  06/30/1996  VTAP 3480  MASTER
A00404  A00404  D041044  06/30/1996  VTAP 3480  MASTER
A00405  A00405  D041044  04/30/2000  VTAP 3480  MASTER
A00406  A00406  D041044  04/30/2000  VTAP 3480  MASTER
A00407  A00407  D041044  05/30/2000  VTAP 3480  MASTER

```

Figure 140. EDGJRVOL: Sample Report of Volumes Sorted by Expiration Date

Creating a List of DFSMSrmm SMF Volume Records

EDGJSMF lists DFSMSrmm SMF volume records in a readable format.

EDGJSMF Input and Output

EDGJSMF input and output is as follows:

Input:

The input for EDGJSMF is RAWSMF DD CARD, which contains SMF records.

Output:

The output for EDGJSMF is VREPT DD CARD, which contains a summary of SMF records.

EDGJSMF Customization

Use the following information to customize the EDGJSMF sample job:

TOOLIN

This file contains the ICETOOL control statements. The DISPLAY statement defines the format of a report and the fields from the input records to include in that report. You can customize the fields and the column header information to display any information from the SMF record or the volume information included in the record. The macro EDGSMFSY provides DFSORT symbolic names for the fields in the SMF records. The macro EDGSMFAR, as described in “SMF Audit Record Header Information: EDGSMFAR” on page 235, maps the SMF record. The EDGSVREC macro, as described in “SMF Volume Information: EDGSVREC” on page 264, maps the contents of the volume information.

RAWSMF

This is the file that identifies the data sets that contain dumped SMF records. They are produced using the IFASMFDP utility. Set the data set names to those used on your system to contain archived SMF records.

SMFVCNTL

This file contains control statements that control the selection of SMF records. You can customize the SMF record number to match that used in your installation. If the RAWSMF file contains only DFSMSrmm SMFAUD records you can remove the check for the SMF record number. The SMF record number must be specified in hexadecimal. If you do not know what the record numbers are, you can use the sample job EDGJSMFP which summarizes the SMF record numbers by type and provides decimal and hexadecimal record numbers. See "Creating a Summary of SMF Records" on page 149 for more about the EDGJSMFP sample job.

SYSUT2

This file creates the output file of selected SMF records and sets the record format to RECFM=VB. Set the data set name as required in your installation. Remember to update the data set name in the CLEAN step SYSIN file.

EDGJSMF Examples

Figure 141 shows a sample report that is sorted by log date and log time and includes all DFSMSrmm SMF volume records.

```
DFSMSrmm - SMF Audit Records      11/27/95      15:23:29      - 1 -
```

TIME	DATE	SYS	USER	ACT	VOLUME	CREATE	LASTCH	USER	SYS	LASTUSCH
7104C7	95330	E4E4	RDRHSME	C	111673	1991266	1995330	*OCE	E4E4	1995320
7104E5	95330	E4E4	RDRHSME	C	111673	1991266	1995330	*OCE	E4E4	1995320
7106EB	95330	E4E4	RDRHSME	C	111720	1991267	1995330	*OCE	E4E4	1995278
710717	95330	E4E4	RDRHSME	C	111720	1991267	1995330	*OCE	E4E4	1995278
766363	95330	E4E4	RDRHSME	C	111673	1991266	1995330	*OCE	E4E4	1995320
766371	95330	E4E4	RDRHSME	C	111673	1991266	1995330	*OCE	E4E4	1995320
7663C2	95330	E4E4	RDRHSME	C	111673	1991266	1995330	*OCE	E4E4	1995320
76B708	95330	E4E4	RDRHSME	C	111720	1991267	1995330	*OCE	E4E4	1995278
76B712	95330	E4E4	RDRHSME	C	111720	1991267	1995330	*OCE	E4E4	1995278
78657E	95330	E4E4	RDRHSME	C	111674	1991239	1995330	*OCE	E4E4	1995201
78659D	95330	E4E4	RDRHSME	C	111674	1991239	1995330	*OCE	E4E4	1995201
79347F	95330	E4E4	RDRHSME	C	111674	1991239	1995330	*OCE	E4E4	1995201

Figure 141. EDGJSMF: Sample Report of a List of All DFSMSrmm SMF Volume Records

The data columns are:

TIME

The log time of the record.

DATE

The log date of the record.

SYS

The SMF ID of the system that created the SMF record.

USER

The user ID of the user requesting the function that caused the creation of the SMF record.

ACT

Activity type

A The record was added.

C The record was changed.

D The record was deleted.

VOLUME

The serial number of the volume.

CREATE

The creation date of the volume.

LASTCH

The last change date of the volume.

USER

The last change user ID.

SYS

The CPU system ID of the last change.

LASTUSCH

The last user change date. This is the date the volume was last changed by command.

Creating a Summary of SMF Records

EDGJSMFP produces a report that provides the number of each SMF record type found in SMF data.

EDGJSMFP Input and Output

EDGJSMFP input and output is as follows:

Input:

The input for EDGJSMFP is RAWSMF DD CARD, which contains SMF records.

Output:

The output for EDGJSMFP is VREPT DD CARD, which contains SMF record numbers and counts.

EDGJSMFP Customization

Use the following information to customize the EDGJSMFP sample job:

TOOLIN

This file contains the ICETOOL control statements. The OCCUR statement defines the contents of a summary report and the fields from the input records to include in that report. You can customize the fields and the column header information to display any information from the SMF record or the volume information included in the record. The header part of SMF records is a common format.

RAWSMF

This is the file that identifies the data sets that contain dumped SMF records. They are produced using the IFASMFDP utility. Set the data set name to that used on your system to contain archived SMF records.

EDGJSMFP Examples

Figure 142 on page 150 shows a sample report of SMF audit records and the number of each record.

SMF RECORD NUMBER	COUNT OF RECORDS	HEX EQUIVALENT
2	1	02
3	1	03
248	817	F8

Figure 142. EDGJSMFP: Sample Report of SMF Audit Record Counts by Record Number

The data columns are:

SMF RECORD NUMBER

The record number that identifies the type of the SMF record.

COUNT OF RECORDS

The number of SMF records, which are sorted by the SMF record number.

HEX EQUIVALENT

The SMF record number in hex that matches the first data column, which is the SMF record number in decimal.

Creating a Report about Volumes in Storage Locations

EDGJVLT reads the DFSMSrmm extract data set and creates a report of volumes currently in storage locations.

You must confirm any outstanding volume moves before running this report to obtain accurate results.

EDGJVLT Input and Output

EDGJVLT input and output is as follows:

Input:

The input for EDGJVLT is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJVLT is:

- RMMVLT DD CARD, which contains volumes in storage locations sorted by volume serial number.
- RMMVLTS DD CARD, which contains the number of volumes by location.

EDGJVLT Customization

Use the following information to customize the EDGJVLT sample job:

TOOLIN

The sample job produces a report about volumes by storage location. The volumes are sorted by location name and bin number. The sample report also produces a summary of the number of volumes by storage location.

You can customize your own owner reports by changing the layout of the report defined in the sort DISPLAY statement. Select the fields you want to include in the report and place them in the correct order. To produce reports with records in a different sequence, you have to customize the SORT statement included in the VLTSCNTL files.

EDGJVLT Examples

Figure 143 is sorted by storage location and bin number and includes all volumes currently in storage locations.

```
DFSMsrmm - Volumes in Stores Sorted by VOLSER      12/12/95      13:52:05      - 1 -
```

VOLSER	DSNAME	JOBNAME	ASDATE	STORE	STORE DATE	BIN #	MEDIANM
111056	RTSGM.DUMPMPLY.SSCPPS.G0056V00	MASTMTLY	05/12/1995	DISTANT	08/12/1995	000001	TAPE
111019	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	DISTANT	23/06/1995	000002	TAPE
111021	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	DISTANT	23/06/1995	000004	TAPE
111023	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	DISTANT	23/06/1995	000005	TAPE
111036	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	LOCAL	23/06/1995	000006	TAPE
111044	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	LOCAL	23/06/1995	000007	TAPE
111050	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	LOCAL	23/06/1995	000008	TAPE
111051	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	REMOTE	23/06/1995	000009	TAPE
111066	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	REMOTE	23/06/1995	000010	TAPE
111005	RHSM.DMP.VRDUMP.V8E4U06.D95332.T454304	HSME4	28/11/1995	REMOTE	01/12/1995	000013	TAPE
111069	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	REMOTE	23/06/1995	000014	TAPE
111906	RHSM.DMP.VRDUMP.VE4DA05.D95094.T290804	HSME4	04/04/1995	REMOTE	07/04/1995	000016	TAPE
111070	RTSGM.DUMPMPLY.SYSPPT.G0029V00	MASTMTLY	20/06/1994	REMOTE	23/06/1995	000017	TAPE

Figure 143. EDGJVLT: Sample Report of Volumes in Storage Location

The data columns are:

VOLSER

The serial number of the volume.

DSNAME

The first file data set name.

JOBNAME

The name of the job that created the data set.

ASDATE

The date that the volume was assigned to the current owner.

STORE

The name of the storage location.

STORE DATE

The date that the volume move into the storage location was confirmed.

BIN #

The bin number, which identifies the shelf location in a storage location. A shelf location is a single space on a shelf where you store removable media.

MEDIANM

The media name, which is the value that describes the shape of the media

Figure 144 shows a sample report of volumes that are sorted by storage location.

```
DFSMsrmm - Volume Counts by Location      11/14/95      05:49:51      - 1 -
```

STORE	COUNT
DISTANT	4
LOCAL	3
REMOTE	6

Figure 144. EDGJVLT: Sample Report of Volume Counts by Location

The data columns are:

STORE

The storage location

COUNT

The number of volumes, which are sorted by storage location

Creating a Report about Volumes Moving to Storage Locations

EDGJVLTM reads the DFSMSrmm extract data set and creates a report of volumes moving to storage locations.

EDGJVLTM Input and Output

EDGJVLTM input and output is as follows:

Input:

The input for EDGJVLTM is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The output for EDGJVLTM is:

- RMMVLTM DD CARD, which contains volumes moving to a storage location.
- RMMVLTMS DD CARD, which contains the number of volumes by destination.

EDGJVLTM Customization

Use the following information to customize the EDGJVLTM sample job:

TOOLIN

The sample job produces a report for all volumes moving to a storage location. The sample report also produces a summary of the volumes by destination location.

You can customize the reports by changing the sort DISPLAY statement.

To produce reports with records in a different sequence, you have to customize the SORT statement included in the VLTSCNTL file.

EDGJVLTM Examples

Figure 145 is sorted by destination and volume serial number and includes only volumes that are ready to move to storage locations.

```
DFSMSrmm - Volumes Moving to Storage Location      12/12/95      15:01:49      - 1 -
```

VOLSER	DSNAME	JOBNAME	ASDATE	DEST	STORE DATE	BIN #	MEDIANM
111000	RHSM.HMIGTAPE.DATASET	HSME4	28/11/1995	VLTX	10/11/1995		TAPE
111001	RHSM.DMP.VRDUMP.VE4DA08.D95318.T442904			VLTX	01/12/1995		TAPE
111002	RHSM.DMP.VRDUMP.VE4DA06.D95318.T301404			VLTX	01/12/1995		TAPE
111003	SYSMF.E4.WEEKLY.DATA.G0185V00	PSMFE4W2	13/11/1995	VLTX	29/09/1995		TAPE
111004	RTSGM.VRDUMP.V8E7U01.G0277V00			VLTX	29/09/1995		TAPE
111006	RTSGM.VRDUMP.V8E1MV3.G0272V00			VLTX	04/11/1995		TAPE
111007	RTSGM.VRDUMP.V8E1MV3.G0272V00			VLTX	04/11/1995		TAPE
111008	RHSM.HMIGTAPE.DATASET	HSME4	01/12/1994	VLTX	24/10/1994		TAPE
111009	RHSM.DMP.VRDUMP.VE4DA06.D95318.T301404			VLTX	01/12/1995		TAPE
111013	RTSGM.DUMPWKLY.MSMP02.G0031V00			VLTX	29/09/1995		TAPE
111014	RTSGM.DUMPWKLY.MSMP02.G0031V00			VLTX	03/10/1994		TAPE
111015	RTSGM.DUMPMTLY.V8ESA13.G0027V00	ESAMSTRM	16/05/1993	VLTX	14/05/1993		TAPE
111016	RHSM.BACKTAPE.DATASET	HSME4	24/08/1995	VLTX	11/08/1995		TAPE
111017	RHSM.BACKTAPE.DATASET	HSME4	25/11/1994	VLTX	24/10/1994		TAPE

Figure 145. EDGJVLTM: Sample Report of Volumes Moving to Storage Locations

The data columns are:

VOLSER

The serial number of the volume.

DSNAME

The name of the first dataset on the volume.

JOBNAME

The name of the job that created the data set.

ASDATE

The date that the volume was assigned to the current owner.

DEST

The destination, the target storage location of the volume.

STORE DATE

The date that the volume destination was set or the date that the volume was ejected, whichever is more recent.

BIN #

The bin number, which identifies the shelf location in a storage location. A shelf location is a single space on a shelf where you store removable media.

MEDIANM

The media name, which is the value that describes the shape of the media

Figure 146 shows a sample report of the number of volumes in each identified storage location.

```
DFSMSrmm - Volume Counts by Destination      12/12/95      15:01:50      - 1 -  
  
STORE          COUNT  
-----  
VLTX          14
```

Figure 146. EDGJVLTM: Sample Report of Volume Counts by Location

The data columns are:

STORE

The destination storage location.

COUNT

The number of volumes, which are sorted by storage location.

Creating Volume Reports Sorted by Volume Serial Number

EDGJVOL reads the DFSMSrmm extract data set and creates reports that are sorted by volume serial number.

EDGJVOL Input and Output

EDGJVOL input and output is as follows:

Input:

The input for EDGJVOL is EXTRACT DD CARD, which is the DFSMSrmm extract data set.

Output:

The input for EDGJVOL is:

- RMMVOL DD CARD, which contains volumes sorted by serial number.
- RMMVOLS DD CARD, which contains the number of volumes by status.
- RMMVOLP DD CARD, which contains the number of volumes by pending release.

EDGJVOL Customization

Use the following information to customize the EDGJVOL sample job:

TOOLIN

The sample job produces a report about all data sets on all volumes. The data sets are sorted by volume. The sample report also produces a summary of the volumes in pending release status and a summary of volumes by volume status.

Before customizing the reports by changing the layout of the report defined in the sort DISPLAY statement, consider that the report is based on the records built by the VOLRCNTL and DSNRCNTL file OUTREC statements. The records are built using the DFSMSrmm extract data set records for volumes and data sets.

To change the fields included in the report, you might have to update the OUTREC statements to add the additional fields into the output records.

To produce reports with records in a different sequence, customize the SORT statement included in the VOLFCNTL file.

EDGJVOL Examples

Figure 147 is sorted by volume serial number, file sequence on the volume, and data set name. The sample report lists all the volumes.

```
DFSMSrmm - Volumes Sorted by Serial Number      12/12/95      13:58:32      - 1 -
```

VOLSER	DSNAME	JOBNAME	VSEQ	AS/CR DATE	EXPDT	JCL EXPDT	ST	R
CIP4B4	BMC.CIP.INSTALL		1	13/03/1995	12/03/1996		US	N
	BMC.ISIUNLD.BTCHUNLD		1	13/03/1995				
	BMC.ISIUNLD.CNTL		1	13/03/1995				
	BMC.ISIUNLD.LOAD		1	13/03/1995				
	BMC.ISIUNLD.DATA		1	13/03/1995				
CLB201			1	21/07/1995	20/07/1996		MA	N
CLB203			1	21/07/1995	20/07/1996		MA	N
CLB204			1	21/07/1995	20/07/1996		MA	N
CN1698	COMPAREX.OBJECT		1	21/03/1995	20/03/1996		US	N
CN4545	CW.FA.FILE1		1	24/03/1995	22/03/1996		US	N
	CW.FA.FILE2		1	27/03/1995				
CN5072	CW.FA.FILE1		1	03/04/1995	02/04/1996		US	N
	CW.FA.FILE2		1	03/04/1995				
CRP120	SMPMCS		1	02/08/1995	31/07/1996		MA	N
	HCRP120.F1		1	14/08/1995				
	HCRP120.F2		1	14/08/1995				
CRWPMT	RW.V1R3M0.JCLMT		1				SC	N
	RW.V1R3M0.COBQMT		1	07/12/1992				
	RW.V1R3M0.COBAMT		1	07/12/1992				
	RW.V1R3M0.RUNMT		1	07/12/1992				
DK3062			1	03/03/1994	00/00/1998		US	N
DLS311			1	06/12/1995	30/11/1996		MA	N
DL0692	CANDLE.MAINT.PTFINFO		1	03/03/1994	00/00/1998		US	N
DL1202			1	21/07/1995	20/07/1996		MA	N
INFA61	INFOREM.ALLOCPTF.INSTRUCT		1	12/05/1995	11/05/1996		MA	N
INFB61	INFOREM.BASEPTF.INSTRUCT		1	12/05/1995	11/05/1996		MA	N
....								

Figure 147. EDGJVOL: Sample Reports of Volumes Sorted by Volume Serial Number

The data columns are:

VOLSER

The volume serial number. The volume serial number is blank for all files other than the first file.

DSNAME

The name of the data set on the volume.

JOBNAME

The creating jobname which is the name of the job that created the data set.

VSEQ

The volume sequence number for the dataset.

AS/CR DATE

The date that the volume was assigned to the current owner for volumes and first file. The date that any data set other than the first file was created.

EXPDT

The expiration date.

JCL EXPDT

The original expiration date.

ST

The status of the volume, which can be one of the following:

- MA - Master
- US - User
- SC - Scratch
- IN - Init
- EN - Entry

R Volume pending release, which can be one of the following:

- N, which means that no release is pending for the volume.
- Y, which means that release is pending for the volume.

Figure 148 shows a sample report of volumes in either master or scratch status.

```

DFSMSrmm - Volume Counts by Status          11/10/95      02:47:28      - 1 -
STATUS          COUNT
-----          -
MASTER          38
SCRATCH         17

```

Figure 148. EDGJVOL: Sample Report of Volume Counts by Status

The data columns are:

STATUS

The status of the volume, which can be one of the following:

- MASTER
- SCRATCH
- USER
- INIT
- ENTRY

COUNT

The number of volumes which are sorted by volume status.

Figure 149 shows a sample report of the number of volumes that are either pending release or not pending release.

```
DFSMSrmm - Volume Counts by Pending Release      11/10/95      02:47:30      - 1 -  
  
PENDING RLSE          COUNT  
-----  
N                      55
```

Figure 149. EDGJVOL: Sample Report of Volume Counts by Pending Release Status

The data columns are:

PENDING RLSE

Volume pending release, which can be one of the following:

- N, which means that no release is pending for the volume.
- Y, which means that release is pending.

COUNT

The number of volumes which are sorted by pending release type.

Chapter 8. Creating REXX EXECs

This chapter contains information that you can use to create your own REXX EXECs or procedures to use with DFSMSrmm.

To get the TSO subcommands to return information as REXX variables, you must set the REXX variable SYSAUTH.EDGDATE to a valid abbreviation of a DATEFORM value.

All commands set the DFSMSrmm reason code into variable EDG@RC, if the return code in the REXX variable RC is 4, 12, or 20.

Some stem variables, such as EDG@VOL and EDG@DSN, use the stem value of 0 to indicate the number of items in the array. For example, if you issue the RMM SEARCHVOLUME subcommand, EDG@VOL.0 might contain 2, indicating two volumes met the search criteria. EDG@VOL.1 contains the first volume serial number, and EDG@VOL.2 contains the second volume serial number.

All stem variables, such as EDG@VOL and EDG@DSN, use the stem value of 0 to indicate the number of items in the array. For example, if you issue the RMM LISTCONTROL LOCDEF subcommand, EDG@LDMN.1.0 variable contains the number of media names used for the first location. EDG@LDMN.1.1 contains the first media name and EDG@LDMN.1.2 contains the second media name. EDG@LDMN.2.0 variable contains the number of media names used for the second location. EDG@LDMN.2.1 contains the first media name and EDG@LDMN.2.2 contains the second media name.

For more information about REXX variables you can specify, see *z/OS DFSMSrmm Guide and Reference*.

Using Sample REXX EXECs

The following examples are supplied as members EDGXMP1 and EDGXMP2 in the DFSMSrmm SAMPLIB data set. You can modify the samples to obtain information about your volumes and data sets.

EDGXMP1 VOLCHAIN EXEC

Use EDGXMP1 to list all the volumes in a multivolume set of volumes, as shown in Figure 150 on page 158.

```

/*REXX*****
/*
/* VOLCHAIN EXEC - Given any volume serial number it lists all the
/*          volumes in the multivolume set
/*
/* Variables used from LISTVOLUME command:
/*          edg@vol - Volume serial number
/*          edg@pvl - Volume serial number of previous volume in
/*                  multivolume chain.
/*          edg@nvl - Volume serial number of next volume in
/*                  multivolume chain.
/*
/******
arg volser          /* Use parameter supplied as the
                   /* volume serial.

Do while volser = '' /* No volume serial so ask for one*/
  Say "Enter Volume Serial:" /* Issue prompt to TSO user
  Pull volser          /* Get volume serial from TSO user*/
end

Call LISTVOL volser /* Set variable information for
                   /* requested volume.

If result = 0 then /* Are variables OK?
do
  nextvol = edg@nvl /* Save the next volume pointer
  push edg@vol      /* Put this volume serial on the
                   /* stack.

                   /* Chain through the previous
                   /* volumes, listing each and
                   /* putting each volume serial on
                   /* the stack.

Do while (result = 0) & (strip(edg@pvl) ^= '')
  Call LISTVOL edg@pvl /* Set variable information for
                   /* previous volume.
  If result = 0 then /* If previous volume exists then
  Push edg@vol      /* Put its serial number on the
                   /* stack.
End /* of chaining prevvol pointers */

edg@nvl = nextvol /* Start the chain at the next
                   /* volume of the volume which was
                   /* listed first.

                   /* Chain through the next volumes
                   /* listing each and putting each
                   /* volume serial on the stack.

```

Figure 150. VOLCHAIN EXEC Sample REXX EXEC (Part 1 of 2)


```

Do while (result = 0) & (strip(edg@nv1) ^= '')
  Call LISTVOL edg@nv1          /* Set variable information for */
                                /* previous volume.             */
  If result = 0 then           /* If previous volume exists then */
    Queue edg@vol             /* put its serial number on the */
                                /* stack.                         */
  End                          /* of chaining nextvol pointers */

Do queued()                   /* For each volume in the multi- */
  pull volser                  /* volume chain, pull the serial */
  say volser                   /* off the stack and write it to */
  End /* of volume list */     /* the TSO user.                 */
end /* of successful list */

exit(0)                        /* return to caller              */

LISTVOL:                       /* LISTVOLUME Procedure:        */
                                /* Input parameter: volume serial */
                                /* Output:                       */
                                /* Result=0: Complete set of     */
                                /* listvolume variables          */
                                /* Result=4: Error message       */
                                /* issued to TSO user           */

arg volser
sysauth.edgdate = "EUROPEAN"  /* Tell RMM TSO command to return */
                                /* output as REXX variables and   */
                                /* dates in EUROPEAN (DD/MM/YYYY) */
                                /* format.                        */
save_prompt = prompt("OFF")   /* Turn PROMPTing off.           */

                                /* Get volume information from    */
                                /* DFSMSrmm.                     */
address "TSO" "RMM LISTVOLUME "volser" ALL"
If rc = 0 then
  lvresult = 0                 /* Indicate Successful LISTVOLUME */
else
  do
    drop sysauth.edgdate      /* An error has occurred. Tell   */
                                /* the RMM TSO command to return */
                                /* output via messages.         */
                                /* Get error information from    */
                                /* DFSMSrmm.                   */

    say "LISTVOLUME "volser
    address "TSO" "RMM LISTVOLUME "volser
    lvresult = 4               /* Indicate Unsuccessful        */
                                /* LISTVOLUME.                  */
  end
junk = prompt(save_prompt)    /* Restore PROMPT status.        */
return lvresult               /* Return to caller.             */

```

Figure 150. VOLCHAIN EXEC Sample REXX EXEC (Part 2 of 2)

EDGXMP2 DSNLIST EXEC

Use EDGXMP2 to display volume information, as shown in Figure 151.

```
/*REXX*****  
/*  
/* DSNLIST EXEC - Given any volume serial number it displays all the */  
/* information held by DFSMSrmm about the data sets on*/  
/* the volume. */  
/* */  
/* Variables used from SEARCHDATASET command: */  
/* edg@dsn.0 - number of data sets on the volume. */  
/* edg@dsn.x - data set name of each of the data sets on */  
/* volume (x=1 to edg@dsn.0). */  
/* edg@vol.x - volume serial number (x=1 to edg@dsn.0) */  
/* edg@seq.x - data set sequence number (x=1 to edg@dsn.0) */  
/* */  
/*****  
arg volser /* Use parameter supplied as the */  
/* volume serial. */  
  
Do while volser = '' /* No volume serial so ask for one*/  
 Say "Enter Volume Serial:" /* Issue prompt to TSO user */  
 Pull volser /* Get volume serial from TSO user*/  
end  
  
sysauth.edgdate = "EUROPEAN" /* Tell RMM TSO command to return */  
/* output as REXX variables and */  
/* dates in EUROPEAN (DD/MM/YYYY) */  
/* format. */  
save_prompt = prompt("OFF") /* Turn PROMPTing off. */  
save_msg = msg("OFF") /* Turn messages off. */  
/* Get information for data sets */  
/* on the volume */  
address "TSO" "RMM SEARCHDATASET D(*) VOLUME("volser") LIMIT(*)"  
junk = msg(save_msg) /* Restore previous message status*/  
  
If rc = 0 then  
 do  
 drop sysauth.edgdate /* Tell the RMM TSO command to */  
 /* return output via messages. */  
  
 /* Display data set listed by the */  
 /* Search command until all are */  
 /* displayed or non-zero return */  
 /* code received. */
```

Figure 151. DSNLIST EXEC Sample REXX EXEC (Part 1 of 2)

```

Do dataset = 1 to edg@dsn.0 while (rc = 0)
  address "TSO" "RMM LISTDATASET '"edg@dsn.dataset"'
    VOLUME("edg@vol.dataset") SEQ("edg@seq.dataset)"
  say "" /* Write a couple of extra blank */
  say "" /* lines */
end
/* complete with a summary */
say edg@dsn.0 "Data sets on volume "volser" displayed."
end
else
do
drop sysauth.edgdate /* An error has occurred. Tell */
/* the RMM TSO command to return */
/* output via messages. */
/* Get error information from */
/* DFSMSrmm. */
say "SEARCHDATASET D(*) VOLUME("volser") LIMIT(*)"
address "TSO" "RMM SEARCHDATASET D(*) VOLUME("volser") LIMIT(*)"
end
junk = prompt(save_prompt) /* Restore PROMPT status. */
exit(0) /* return to caller */

```

Figure 151. DSNLIST EXEC Sample REXX EXEC (Part 2 of 2)

Appendix A. DFSORT Symbols for Use with DFSMSrmm

DFSMSrmm provides you with symbols that you can use in DFSORT and ICETOOL jobs to create reports for DFSMSrmm-managed resources. These symbol mappings are available in SYS1.MACLIB after SMP/E APPLY processing, as members EDGACTSY, EDGEXTSY, and EDGSMFSY. You can access these symbols in your DFSORT and ICETOOL jobs by pointing the SYMNames DD statement directly to any of these members. Alternatively, you can copy these members somewhere else, modify them if appropriate (for example, you could add your own constant symbols), and point the SYMNames DD to the modified member or data set.

This appendix describes the available symbol mappings, which are:

- "EDGACTSY: Activity File Symbols".
- "EDGEXTSY: Extract Data Set Symbols" on page 167.
- "EDGSMFSY: SMF Record Symbols" on page 186.

EDGACTSY: Activity File Symbols

EDGACTSY provides the DFSORT symbol mapping for the DFSMSrmm inventory management activity file as follows:

```
*****
*
* RMM Inventory Management Activity File Record
* DFSORT Symbol mapping
*
*****
* z/OS DFSMSrmm V1R3
*
*PROPRIETARY V3 STATEMENT
*LICENSED MATERIALS - PROPERTY OF IBM
*"RESTRICTED MATERIALS OF IBM"
*5694-A01
*(C) COPYRIGHT 1993,2000 IBM CORP.
*STATUS = HDZ11H0
*END PROPRIETARY V3 STATEMENT
*
*****
* SEE "z/OS DFSMSrmm Reporting" FOR FIELD DETAILS ON RMM RECORDS §03C*
* SEE "DFSORT APG" FOR DETAILS OF USING SYMBOLS. §03C*
*****
* CHANGE ACTIVITY:
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols @LGA *
* $01=0W44589,210,000522,BG: Correct DFSMSrmm reference comment §01A *
* $02=0W45053,210,000616,MW Cleanup EDGJACTP symbols §02A *
*****
ACTRC,1,453 01250000
***** 01300000
* ACTRC: RMM ACTIVITY file records * 01350000
***** 01400000
ACTRC_RDW,1,4,BI record descriptor word 01450000
ACTRC_RDW_LEN,=,2,BI record descriptor - length 01500000
ACTRC_RDW_SEG,*,2,BI record descriptor - segment 01550000
***** 01600000
* Common record prefix * 01650000
***** 01700000
ACTRC_PREFIX,*,4,CH common prefix 01750000
ACTRC_PRE_TYPE,=,1,CH activity file record type 01800000
ACTRC_PRE_TYPE_HDR,'H' header record 01850000
ACTRC_PRE_TYPE_DSN,'D' data set details record 01900000
ACTRC_PRE_TYPE_VOL,'V' volume details record 01950000
```

EDGACTSY

SKIP,3	reserved	02000000
*****		02050000
* Start overlay area		* 02100000
*****		02150000
ACTRC_DATA,*	start overlay for details	02200000
*****		02250000
* Header Record		* 02300000
*****		02350000
POSITION,ACTRC_DATA	start at ACTRC_DATA	02400000
ACTRC_HDR_DATA,=	overlay for header data	02450000
ACTRC_HDR_RUN_DATE,=,10,CH	inventory management date	02500000
ACTRC_HDR_RUN_TIME,*,6,CH	inventory management time	02550000
ACTRC_HDR_VERIFY_DATE,*,10,CH	inventory mgmt. VERIFY date	02600000
ACTRC_HDR_EXEC_PARMS,*,16	execution parameters	02650000
ACTRC_HDR_BACKUP,=,1,CH	BACKUP	02700000
ACTRC_YES,'Y'	yes	02750000
ACTRC_NO,'N'	no	02800000
ACTRC_HDR_DSTORE,*,1,CH	DSTORE	02850000
* ACTRC_YES,'Y'	yes	02900000
* ACTRC_NO,'N'	no	02950000
ACTRC_HDR_EXPROC,*,1,CH	EXPROC	03000000
* ACTRC_YES,'Y'	yes	03050000
* ACTRC_NO,'N'	no	03100000
ACTRC_HDR_RPTTEXT,*,1,CH	RPTTEXT	03150000
* ACTRC_YES,'Y'	yes	03200000
* ACTRC_NO,'N'	no	03250000
ACTRC_HDR_VRSEL,*,1,CH	VRSEL	03300000
* ACTRC_YES,'Y'	yes	03350000
* ACTRC_NO,'N'	no	03400000
ACTRC_HDR_VERIFY,*,1,CH	VERIFY	03450000
* ACTRC_YES,'Y'	yes	03500000
* ACTRC_NO,'N'	no	03550000
ACTRC_HDR_DATE,*,1,CH	DATE for VERIFY run	03600000
* ACTRC_YES,'Y'	yes	03650000
* ACTRC_NO,'N'	no	03700000
ACTRC_HDR_DATEFORM,*,1,CH	DATEFORM	03750000
ACTRC_HDR_DATEFORM_AMERICAN,'A'	American	03800000
ACTRC_HDR_DATEFORM_EUROPEAN,'E'	European	03850000
ACTRC_HDR_DATEFORM_ISO,'I'	ISO	03900000
ACTRC_HDR_DATEFORM_JULIAN,'J'	Julian	03950000
ACTRC_HDR_CATSYNCH,*,1,CH	CATSYNCH	03970000
* ACTRC_YES,'Y'	yes	03990000
* ACTRC_NO,'N'	no	04010000
SKIP,7	reserved	04030000
ACTRC_HDR_OPTIONS,*,31	parmlib options	04065000
ACTRC_HDR_VRSJOBNAME,=,1,CH	VRSJOBNAME priority	04100000
ACTRC_HDR_VRSJOBNAME_FIRST,'1'	jobname first	04150000
ACTRC_HDR_VRSJOBNAME_SECOND,'2'	jobname second	04200000
ACTRC_HDR_VRSCHANGE,*,1,CH	VRSCHANGE	04250000
ACTRC_HDR_VRSCHANGE_VERIFY,'V'	verify	04300000
ACTRC_HDR_VRSCHANGE_INFO,'I'	information	04350000
ACTRC_HDR_CATRETPD,*,4,CH	CATRETPD hours	04400000
ACTRC_HDR_VRSMIN_COUNT,*,10,CH	VRSMIN min. number of VRSS	04450000
ACTRC_HDR_VRSMIN_ACTION,*,1,CH	VRSMIN action	04500000
ACTRC_HDR_VRSMIN_ACTION_FAIL,'F'	fail	04550000
ACTRC_HDR_VRSMIN_ACTION_WARN,'W'	warning	04600000
ACTRC_HDR_VRSMIN_ACTION_INFO,'I'	information	04650000
ACTRC_HDR_OPT_VRSEL,*,1,CH	VRSEL	04700000
ACTRC_HDR_OPT_VRSEL_NEW,'N'	new	04750000
ACTRC_HDR_OPT_VRSEL_OLD,'O'	old	04800000
ACTRC_HDR_OPT_VRSEL_BLANK,' '	blank -> old	04850000
ACTRC_HDR_UNCATALOG,*,1,CH	UNCATALOG	04900000
ACTRC_HDR_UNCATALOG_NO,'N'	no	04950000
ACTRC_HDR_UNCATALOG_YES,'Y'	yes	05000000
ACTRC_HDR_UNCATALOG_SCRATCH,'S'	scratch volume only	05050000
ACTRC_HDR_TPRACF,*,1,CH	TPRACF	05100000
ACTRC_HDR_TPRACF_NONE,'N'	none	05150000

ACTRC_HDR_TPRACF_PREDEFINED,'P'	predefined profiles	05200000
ACTRC_HDR_TPRACF_AUTOMATIC,'A'	automatic profiles	05250000
ACTRC_HDR_SYSID,*,8,CH	SYSID	05300000
ACTRC_HDR_CATSYSID,*,1,CH	CATSYSID	05310000
ACTRC_HDR_CATSYSID_NOT_SET,'N'	not set	05320000
ACTRC_HDR_CATSYSID_SET,'Y'	set to 1-16 sysid's	05330000
ACTRC_HDR_CATSYSID_SHARED,'*'	set to fully shared	05340000
ACTRC_HDR_OPT_RETAINBY,*,1,CH	RETAINBY V/S	05341400
ACTRC_HDR_OPT_RETAINBY_VOLUME,'V'	volume	05342800
ACTRC_HDR_OPT_RETAINBY_SET,'S'	set	05344200
ACTRC_HDR_OPT_MOVEBY,*,1,CH	MOVEBY V/S	05345600
ACTRC_HDR_OPT_MOVEBY_VOLUME,'V'	volume	05347000
ACTRC_HDR_OPT_MOVEBY_SET,'S'	set	05348400
ACTRC_HDR_END,*	End of header record	05350000
*****		05400000
* Data Set Record		* 05450000
*****		05500000
POSITION,ACTRC_DATA	start at ACTRC_DATA	05550000
ACTRC_DSN_DATA,=,445,CH	overlay for data set data	05600000
ACTRC_DSN_DSNAME,=,44,CH	data set name	05650000
ACTRC_DSN_JOBNAME,*,8,CH	creating job name	05700000
ACTRC_DSN_VOL,*,6,CH	volume serial number	05750000
SKIP,8	reserved was dseq/fseq \$LLC	05800000
*	number	05900000
ACTRC_DSN_CRDATE,*,10,CH	data set creation date	05950000
ACTRC_DSN_CRTIME,*,6,CH	data set creation time	06000000
ACTRC_DSN_LOC,*,8,CH	volume location	06050000
ACTRC_DSN_DEST,*,8,CH	volume destination	06100000
ACTRC_DSN_SMS_MC,*,8,CH	SMS management class name	06150000
ACTRC_DSN_VRS_MV,*,8,CH	VRS management value name	06200000
ACTRC_DSN_CATLG,*,1,CH	data set catalog status	06250000
ACTRC_DSN_CATLG_YES,'Y'	cataloged	06300000
ACTRC_DSN_CATLG_NO,'N'	not cataloged	06350000
ACTRC_DSN_CATLG_FAILED,'F'	locate failed	06400000
ACTRC_DSN_CATLG_UNKNOWN,'U'	no locate issued	06450000
ACTRC_DSN_CYCLE,*,10,CH	primary vrs data set	06500000
*	cycle number	06550000
ACTRC_DSN_2CYCLE,*,10,CH	secondary vrs data set	06600000
*	cycle number	06650000
ACTRC_DSN_SUBCHAIN_DROP,*,1,CH	primary subchain drop	06700000
*	reason	06750000
ACTRC_DSN_2SUBCHAIN_DROP,*,1,CH	secondary subchain drop	06800000
*	reason	06850000
SKIP,33	reserved	06900000
ACTRC_DSN_CHANGE,*,8	changes to data set details	06950000
ACTRC_DSN_CHNG_VRS,=,1,CH	vital rec status	07000000
*	ACTRC_YES,'Y'	yes
*	ACTRC_NO,'N'	no
ACTRC_DSN_CHNG_RETDATE,*,1,CH	retention date	07150000
*	ACTRC_YES,'Y'	yes
*	ACTRC_NO,'N'	no
ACTRC_DSN_CHNG_MATCH,*,1,CH	matching VRS	07300000
*	ACTRC_YES,'Y'	yes
*	ACTRC_NO,'N'	no
ACTRC_DSN_CHNG_SUBCHAIN,*,1,CH	retaining Subchain	07450000
*	ACTRC_YES,'Y'	yes
*	ACTRC_NO,'N'	no
SKIP,4	reserved	07600000
ACTRC_DSN_VITAL,*,2,CH	vital record status	07614200
ACTRC_DSN_VITAL_NY,'NY'	newly retained NY	07628400
ACTRC_DSN_VITAL_YN,'YN'	dropped YN	07642600
ACTRC_DSN_VITAL_RETAIN,'RETAINED'	newly retained NY	07656800
ACTRC_DSN_VITAL_DROPPED,'DROPPED'	dropped YN	07671000
ACTRC_DSN_OLD_VITAL,=,1,CH	old vital record status	07685200
*	ACTRC_YES,'Y'	yes
*	ACTRC_NO,'N'	no
ACTRC_DSN_NEW_VITAL,*,1,CH	new vital record status	07800000

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*	ACTRC_YES,'Y'	yes	07850000
*	ACTRC_NO,'N'	no	07900000
	ACTRC_DSN_DROP,*,1,CH	reason for non-retention	07950000
	ACTRC_DSN_DROP_WHILECATALOG,'W'	WHILECATALOG	08000000
	ACTRC_DSN_DROP_UNTILEXPIRED,'U'	UNTILEXPIRED	08050000
	ACTRC_DSN_DROP_CYCLES,'C'	cycles exceeded	08100000
	ACTRC_DSN_DROP_DAYS,'D'	days since creation exceeded	08150000
	ACTRC_DSN_DROP_LASTREF,'L'	days since last reference	08200000
*		exceeded	08250000
	ACTRC_DSN_DROP_EXTRADAYS,'X'	days since subchain start	08300000
*		exceeded	08350000
	ACTRC_DSN_DROP_BYDAYSCYCLE,'B'	by-days-cycles exceeded	08400000
	ACTRC_DSN_DROP_NO_MATCH,'N'	No VRS match	08450000
	ACTRC_DSN_DROP_DUP_GDG,'G'	GDG cycle; duplicate GDG	08500000
	ACTRC_DSN_DROP_VOL_RELEASED,'V'	Volume released / scratch	08550000
	ACTRC_DSN_DROP_BLANK,' '		08600000
	ACTRC_DSN_NEW_LOC,*,8,CH	new required data set locati	08650000
	ACTRC_DSN_OLD_RETDATE,*,10,CH	old data set retention date	08700000
*		Format: see DATEFORM parm	08750000
*		Special date formats:	08800000
*		WHILECATLG	08850000
*		CYCL/nnnnn	08900000
*		CATRETPD	08950000
	ACTRC_DSN_NEW_RETDATE,*,10,CH	new data set retention date	09000000
*		Format: see DATEFORM parm	09050000
*		Special date formats:	09100000
*		WHILECATLG	09150000
*		CYCL/nnnnn	09200000
*		CATRETPD	09250000
	ACTRC_DSN_OLD_MATCH,*,113	old matching VRS	09300000
	ACTRC_DSN_OLD_MTYPE,*,1,CH	old primary VRS type	09350000
	ACTRC_DSN_OLD_MTYPE_DSN,'D'	data set name	09400000
	ACTRC_DSN_OLD_MTYPE_SMS,'S'	SMS management class	09450000
	ACTRC_DSN_OLD_MTYPE_VRS,'V'	VRS management value	09500000
	ACTRC_DSN_OLD_MTYPE_MIX,'M'	DSN and VRS mgmt value	09550000
	ACTRC_DSN_OLD_MTYPE_DSNSMS,'C'	DSN and SMS mgmt class	09600000
	ACTRC_DSN_OLD_MMASK,*,44,CH	old primary VRS mask	09650000
	ACTRC_DSN_OLD_MJOB,*,8,CH	old primary VRS job name	09700000
	ACTRC_DSN_OLD_M2MASK,*,8,CH	old second. VRS mask	09750000
	ACTRC_DSN_OLD_M2JOB,*,8,CH	old second. VRS job name	09800000
	ACTRC_DSN_OLD_CHAINS,*,36,CH	old VRS subchains	09833300
	ACTRC_DSN_OLD_MNAME,*,8,CH	old primary VRS subchain	09866600
*		name	09900000
	ACTRC_DSN_OLD_MDATE,*,10,CH	old primary VRS subchain	09950000
*		start date	10000000
	ACTRC_DSN_OLD_M2NAME,*,8,CH	old second. VRS subchain	10050000
*		name	10100000
	ACTRC_DSN_OLD_M2DATE,*,10,CH	old second. VRS subchain	10150000
*		start date	10200000
	SKIP,8	reserved	10250000
	ACTRC_DSN_NEW_MATCH,*,113	new matching VRS	10300000
	ACTRC_DSN_NEW_VRSS,*,69,CH	new matching VRS	10333300
	ACTRC_DSN_NEW_MTYPE,*,1,CH	new primary VRS type	10366600
	ACTRC_DSN_NEW_MTYPE_DSN,'D'	data set name	10400000
	ACTRC_DSN_NEW_MTYPE_SMS,'S'	SMS management class	10450000
	ACTRC_DSN_NEW_MTYPE_VRS,'V'	VRS management value	10500000
	ACTRC_DSN_NEW_MTYPE_MIX,'M'	DSN and VRS mgmt value	10550000
	ACTRC_DSN_NEW_MTYPE_DSNSMS,'C'	DSN and SMS mgmt class	10575000
	ACTRC_DSN_NEW_MMASK,*,44,CH	new primary VRS mask	10600000
	ACTRC_DSN_NEW_MJOB,*,8,CH	new primary VRS job name	10650000
	ACTRC_DSN_NEW_M2MATCH,*,16,CH	new second. VRS matched	10683300
	ACTRC_DSN_NEW_M2MASK,*,8,CH	new second. VRS mask	10716600
	ACTRC_DSN_NEW_M2JOB,*,8,CH	new second. VRS job name	10749900
	ACTRC_DSN_NEW_CHAINS,*,36,CH	new subchain info	10783200
	ACTRC_DSN_NEW_MNAME,*,8,CH	new primary VRS subchain	10816500
*		name	10850000
	ACTRC_DSN_NEW_MDATE,*,10,CH	new primary VRS subchain	10900000

*		start date	10950000
*	ACTRC_DSN_NEW_M2NAME,*,8,CH	new second. VRS subchain	11000000
*		name	11050000
*	ACTRC_DSN_NEW_M2DATE,*,10,CH	new second. VRS subchain	11100000
*		start date	11150000
	SKIP,8	reserved	11200000
	ACTRC_DSN_DSEQ,*,5,CH	data set sequence number	11216600
	ACTRC_DSN_FILESEQ,*,5,CH	physical file sequence	11233200
	ACTRC_DSN_END,*	End of data set record	11250000
	POSITION,ACTRC_DSN_END		11257100
	ACTRC_OUTFIL,=	Start of fields added by	11264200
*		OUTFIL processing	11271300
	ACTRC_OUTFIL_VITALANDDROP,=,22,CH		11278400
	ACTRC_OUTFIL_VITAL,=,9,=	reformatted VR status	11285500
	ACTRC_OUTFIL_DROP,*,13,=	reformatted drop reason	11292600
			11300000
*	End of ACTRC		11350000
			11400000

EDGEXTSY: Extract Data Set Symbols

EDGEXTSY provides the DFSORT symbol mapping for the DFSMSrmm extract data set that is produced during inventory management as follows:

```

*****
*
* RMM Inventory Management Extract File Record
* DFSORT Symbol mapping
*
*****
* z/OS DFSMSrmm V1R3
*
*PROPRIETARY V3 STATEMENT
*LICENSED MATERIALS - PROPERTY OF IBM
*"RESTRICTED MATERIALS OF IBM"
*5694-A01
*(C) COPYRIGHT 1993,2000 IBM CORP.
*STATUS = HDZ11H0
*END PROPRIETARY V3 STATEMENT
*
*****
* SEE "z/OS DFSMSrmm Reporting §LSC *
* (SC26-7406)" FOR FIELD DETAILS ON RMM RECORDS. §LSC *
* SEE "DFSORT APG (SC33-4035)" FOR DETAILS OF USING SYMBOLS. *
*****
* CHANGE ACTIVITY:
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols §LGA *
* $K1=K160481,210,991007,MW: New Extract Header Record §K1A *
* $01=K161019,210,000118,CHK: Creating Program name symbols §01A *
* $02=0W44589,210,000522,BG : Correct DFSMSrmm reference comment §02A *
* $03=0W45430,210,000726,GB : RVSTACKED_VOLCOUNT printable format §03A *
* $04=0W47651,210,010418,CHK: Add extended report structure §04A *
* $05=0W48921,150,010608,ZB : First file creation system id field §05A *
* $SC=0W49863,210,010502,AP : Minimal Bin Assignment §SCA *
* $K2=KBA0028,213,010828,AP : XREPORT displays wrong values §K2A *
* $LS=RMMV1R3,1R3,011113,CHK: Duplicate Volser §LSA *
* $06=0W52327,210,011203,CHK: Add RHEXTENDED BIN in RHEXT §06A *
*****
EXTRACT_RDW,1,4,BI record descriptor word 01205100
RDRDW,=,4,BI 01210200
RHRDW,=,4,BI §K1A 01212700
RKRDW,=,4,BI 01215300
RORDW,=,4,BI 01220400
RPRDW,=,4,BI 01225500
RRRDW,=,4,BI 01230600
RSRDW,=,4,BI 01235700
RVRDW,=,4,BI 01240800

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RXRDW,=,4,BI                                §04A 01243300
EXTRACT_RDW_LEN,=,2,BI                      record descriptor - length 01245900
RDRDW_LEN,=,2,BI                            01251000
RHRDW_LEN,=,2,BI                            §K1A 01253500
RKRDW_LEN,=,2,BI                            01256100
RORDW_LEN,=,2,BI                            01261200
RPRDW_LEN,=,2,BI                            01266300
RRRDW_LEN,=,2,BI                            01271400
RSRDW_LEN,=,2,BI                            01276500
RVRDW_LEN,=,2,BI                            01281600
RXRDW_LEN,=,2,BI                            §04A 01284100
EXTRACT_RDW_SEG,*,2,BI                      record descriptor - segment 01286700
RDRDW_SEG,=,2,BI                            01291800
RHRDW_SEG,=,2,BI                            §K1A 01294300
RKRDW_SEG,=,2,BI                            01296900
RORDW_SEG,=,2,BI                            01302000
RPRDW_SEG,=,2,BI                            01307100
RRRDW_SEG,=,2,BI                            01312200
RSRDW_SEG,=,2,BI                            01317300
RVRDW_SEG,=,2,BI                            01322400
RXRDW_SEG,=,2,BI                            §04A 01324900
***** 01327500
* RMM Extract File records * 01332600
***** 01337700
EXTRACT,*,1286                               §04C 01343800
***** 01350000
* Common record prefix * 01400000
***** 01450000
EXTRACT_PREFIX,=,4                          01500000
EXTRACT_TYPID,=,1,CH                        01550000
RDTYPE,=,1,CH                               01556200
RHTYPE,=,1,CH                               §K1A 01559300
RKTYPE,=,1,CH                               01562400
ROTYPE,=,1,CH                               01568600
RPTYPE,=,1,CH                               01574800
RRTYPE,=,1,CH                               01581000
RSTYPE,=,1,CH                               01587200
RVTYPE,=,1,CH                               01593400
RXTYPE,=,1,CH                               §04A 01596700
RDTYPEID,'D'                               TYPE 'D' - DATA SET RECORD 01600000
RHTYPEID,'H'                               TYPE 'H' - HEADER RECORD §K1A 01625000
RKTYPEID,'K'                               TYPE 'K' - VRS RECORD 01650000
ROTYPEID,'O'                               TYPE 'O' - OWNER RECORD 01700000
RPTYPEID,'P'                               TYPE 'P' - PRODUCT RECORD 01750000
RRTYPEID,'R'                               TYPE 'R' - RACK RECORD 01800000
RSTYPEID,'S'                               TYPE 'S' - BIN RECORD 01850000
RVTYPEID,'V'                               TYPE 'V' - VOLUME RECORD 01900000
RXTYPEID,'X'                               TYPE 'X' - EXTENDED EXTRACT RECORD §04A 01925000
***** 01950000
* Start overlay area * 02000000
***** 02050000
EXTRACT_DATA,*                              02100000
***** 02150000
* RDEXT: This file maps the information produced for data set * 02200000
* records in the RMM report extract file. * 02250000
* In this record the date format depends on the DATEFORM * 02300000
* selected by EDGHSKP execution parameter or the parmlib * 02350000
* specified value. * 02400000
***** 02450000
POSITION,EXTRACT_DATA                       start at EXTRACT_DATA 02500000
SKIP,3 RESERVED                             02550000
RDDNAME,*,44,CH DATA SET NAME              02600000
***** 02650000
* Start of common fields: * 02700000
* The common fields are in the same place in each record type * 02750000
* in the report extract file. This allows common processing of * 02800000
* these field across multiple record types. * 02850000

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*****		02900000
RDCRDATE,*,10,CH	CREATE DATE of data set record	02950000
RDCRTIME,*,6,CH	CREATE TIME (HHMMSS) of data set	03000000
RDCRSID,*,8,CH	CREATE SYSTEM ID of data set record	03050000
RDLCDATE,*,10,CH	LAST CHANGE DATE of data set record	03100000
RDLCTIME,*,6,CH	LAST CHANGE TIME (HHMMSS) of data set record	03150000
RDLUID,*,8,CH	LAST CHANGE USER ID of data set record	03200000
RDLCSID,*,8,CH	LAST CHANGE SYSTEM ID of data set record	03250000
*****		03300000
* End of common fields		* 03350000
*****		03400000
RDVOLSER,*,6,CH	VOLUME SERIAL NUMBER	03450000
SKIP,4	RESERVED WAS DATA SET SEQUENCE NUMBER	\$LLC 03500000
RDUNITAD,*,4,CH	CREATING DRIVE ADDRESS	03550000
RDRECFM,*,4,CH	RECORD FORMAT	03600000
RDVOLSEQ,*,4,CH	VOLUME SEQUENCE NUMBER	03650000
RDLRECL,*,6,CH	LOGICAL RECORD LENGTH	03700000
RDBLKSZ,*,6,CH	PHYSICAL BLOCK SIZE	03750000
RDBLKCNT,*,8,CH	BLOCK COUNT	03800000
RDOWNDSN,*,8,CH	DATA SET OWNER	03850000
RDSECLV,*,8,CH	SECURITY LEVEL - SHORT	03900000
RDSECLNG,*,30,CH	SECURITY LEVEL - LONG	03950000
RDCOMP,*,1,CH	COMPACTION USED	04000000
RDYES, 'Y'	YES	04050000
RDNO, 'N'	NO	04100000
RDLRDDAT,*,10,CH	DATE DATA SET LAST READ	04150000
RDLWTDAT,*,10,CH	DATE DATA SET LAST WRITTEN	04200000
RDMCNAME,*,8,CH	SMS MANAGEMENT CLASS	04250000
RDVRSVAL,*,8,CH	VRS MANAGEMENT VALUE	04300000
RDSGNAME,*,8,CH	SMS STORAGE GROUP NAME	04350000
RDSCNAME,*,8,CH	SMS STORAGE CLASS NAME	04400000
RDDCNAME,*,8,CH	SMS DATA CLASS NAME	04450000
RDCRTJBN,*,8,CH	CREATING JOB NAME	04500000
RDVRSTYP,*,1,CH	MATCHING VRS TYPE FLAG	04550000
RDVD, 'D'	DATASET	04600000
RDVS, 'S'	SMSMC	04650000
RDVV, 'V'	VRSMV	04700000
RDVM, 'M'	DATASET AND VRSMV	04750000
RDVC, 'C'	DATASET AND SMSMC	04800000
RDVRSNAM,*,44,CH	MATCHING VRS NAME	04850000
RDVRSJBN,*,8,CH	MATCHING VRS JOB NAME MASK	04900000
RDRETDAT,*,10,CH	RETENTION DATE	04950000
RDSTEPNM,*,8,CH	CREATING STEP NAME	05000000
RDDDDNAME,*,8,CH	CREATING DD NAME	05050000
*****		05100000
* RDMDMVID: Is a unique token assigned to every volume and every		* 05150000
* data set in a multi-volume set.		* 05200000
*****		05250000
RDMDMVID,*,8,CH	MULTI-DSET MULTI-VOL ID	05300000
*****		05350000
* Data set size: This is calculated by multiplying the blocksize		* 05400000
* by the number of blocks.		* 05450000
*****		05500000
RDDSSIZE,*,10,CH	APPROX. SIZE OF FILE KBYTES	05550000
RDABEND,*,1,CH	DSET CLOSED BY ABEND	05600000
* RDYES, 'Y'	YES	05650000
* RDNO, 'N'	NO	05700000
*****		05750000
* RDCAT: Set to 'Y' when opened after allocation determines VOLSER		* 05800000
* by reference to the catalog. Once set to 'Y' it is never		* 05850000
* changed.		* 05900000
*****		05950000
RDCAT,*,1,CH	DSET USED VIA CATALOG Y/N	06000000
* RDYES, 'Y'	YES	06050000
* RDNO, 'N'	NO	06100000
RDVRSR,*,1,CH	RETAINED BY VRS	06150000
* RDYES, 'Y'	YES	06200000

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* RDNO,'N' NO 06250000
  SKIP,3 RESERVED 06300000
  SKIP,4 RESERVED WAS LABEL NUMBER LABEL=(XX,NN) $LLC 06350000
***** 06400000
* Primary VRS subchain name: * 06450000
* This is the retaining VRS in the matching * 06500000
* primary VRS chain. It is set only if retained * 06550000
* by a NAME VRS subchain in the primary VRS. * 06600000
***** 06650000
  RDVRSSCH,*,8,CH Primary VRS subchain NAME 06700000
  RDVRSXDS,*,10,CH Primary VRS subchain start date 06750000
***** 06800000
* Retaining Secondary VRS name: * 06850000
* Matching vrs name and job name are included * 06900000
* where a secondary VRS also matches. * 06950000
* The retaining VRS subchain NAME in this * 07000000
* matching VRS is set if it is used to retain * 07050000
* the data set. * 07100000
***** 07150000
  RD2VNME,*,8,CH Secondary VRS name mask 07200000
  RD2VJBN,*,8,CH Secondary VRS jobname mask 07250000
  RD2VSCH,*,8,CH Secondary VRS subchain NAME 07300000
  RD2VXDS,*,10,CH Secondary VRS subchain startdate 07350000
  RDTOTAL_BLKCNT,*,10,CH Total block count across all ds volumes $01A 07355500
  RDPERCENT,*,3,CH Percentage of volume used by data set $01A 07361000
  RDCPGM,*,8,CH Creating program name $01A 07366500
  RDLPGM,*,8,CH Last used program name $01A 07372000
  RDLJOB,*,8,CH Last used job name $01A 07377500
  RDLSTEP,*,8,CH Last used step name $01A 07383000
  RDLDDNM,*,8,CH Last used DD name $01A 07388500
  RDLDEVN,*,4,CH Last used device name $01A 07394000
  RDDSSEQ,*,5,CH Data set sequence number New $LLA 07396000
  RDLABNO,*,5,CH Label number Label=(xx,11) New $LLA 07398000
***** 07400000
* END OF REPORT EXTRACT DATA SET NAME RECORD * 07450000
***** 07500000
RDRCEM,* END OF RDEXT 07550000
* 07551300
***** 07552600
* RHEXT: This macro maps the information in the extract file * 07553900
* header records. * 07555200
* In this record the date format depends on the DATEFORM * 07556500
* selected by EDGHSKP execution parameter or the parmlib * 07557800
* specified value. * 07559100
***** 07560400
POSITION,EXTRACT_DATA start at EXTRACT_DATA $K1A 07561700
  SKIP,47 RESERVED $K1A 07563000
***** 07564300
* Start of common fields: * 07565600
* The common fields are in the same place in each record type * 07566900
* in the report extract file. This allows common processing of * 07568200
* these field across multiple record types. * 07569500
***** 07570800
  RHCRDATE,*,10,CH CREATE DATE of header record $K1A 07572100
  RHCRTIME,*,6,CH CREATE TIME HHMMSS of header record $K1A 07573400
  RHCRSID,*,8,CH CREATE SYSTEM ID of header record $K1A 07574700
  SKIP,10 RESERVED $K1A 07576000
  SKIP,6 RESERVED $K1A 07577300
  SKIP,8 RESERVED $K1A 07578600
  SKIP,8 RESERVED $K1A 07579900
***** 07581200
* End of common fields * 07582500
***** 07583800
  RHDATEFORM,*,1,CH Format of all dates in the extract file $K1A 07585100
  RHDATEFORM_NOTSET,' ' $K1A 07586400
  RHDATEFORM_EUROPEAN,'E' $K1A 07587700
  RHDATEFORM_AMERICAN,'A' $K1A 07589000

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RHDATFORM_ISO,'I'                $K1A  07590300
RHDATFORM_JULIAN,'J'            $K1A  07591600
RHEXTENDED BIN,*,1,CH Extendedbin Enabled $06A  07592400
SKIP,99                          RESERVED  $06C  07593200
*****                          07594200
* END OF REPORT EXTRACT HEADER RECORD 07595500
*****                          07596800
RHCEND,*                          END OF RHEXT $K1A  07598100
*                                  07600000
*****                          07650000
* RKEXT: This file maps the information produced for VRS * 07700000
* records in the RMM report extract file. * 07750000
* In this record the date format depends on the DATEFORM * 07800000
* selected by EDGHSKP execution parameter or the parmlib * 07850000
* specified value. * 07900000
*****                          07950000
POSITION,EXTRACT_DATA start at EXTRACT_DATA 08000000
RKTYPE2,*,1,CH VRS TYPE 08050000
RKTYPVOL,'V' VOLUME VRS 08100000
RKTYPDSN,'D' DATA SET VRS 08150000
RKTYPNAM,'N' NAME VRS 08200000
SKIP,1 RESERVED 08250000
RKDSNAME,*,44,CH DATA SET NAME MASK 08300000
RKNAME,=,8,CH VRS NAME 08350000
RKVOLSER,=,6,CH VOLUME SERIAL MASK 08400000
SKIP,38 RESERVED 08450000
RKGKEY,*,1,CH DATA SET/VOLUME MASK 08500000
RKYES,'Y' YES 08550000
RKNO,'N' NO 08600000
*****                          08650000
* Start of common fields: * 08700000
* The common fields are in the same place in each record type * 08750000
* in the report extract file. This allows common processing of * 08800000
* these field across multiple record types. * 08850000
*****                          08900000
RKCRCRDATE,*,10,CH CREATE DATE of VRS record 08950000
RKCRCRTIME,*,6,CH CREATE TIME (HHMMSS) of VRS record 09000000
RKCRCRSID,*,8,CH CREATE SYSTEM ID of VRS record 09050000
RKLCLDATE,*,10,CH LAST CHANGE DATE of VRS record 09100000
RKLCLTIME,*,6,CH LAST CHANGE TIME (HHMMSS) of VRS record 09150000
RKLCLUID,*,8,CH LAST CHANGE USER ID of VRS record 09200000
RKLCLSID,*,8,CH LAST CHANGE SYSTEM ID of VRS record 09250000
*****                          09300000
* End of common fields * 09350000
*****                          09400000
RKCRCRTJBN,*,8,CH JOBNAME MASK 09450000
RKCRCRETNC,*,1,CH RETAIN BASED ON NUMBER OF CYCLES 09500000
* RKYES,'Y' YES 09550000
* RKNO,'N' NO 09600000
RKCRCRETND,*,1,CH RETAIN BASED ON NUMBER OF ELAPSED DAYS 09650000
* RKYES,'Y' YES 09700000
* RKNO,'N' NO 09750000
RKCRCRETNR,*,1,CH RETAIN BASED ON NUMBER OF DAYS UNREFERENCED 09800000
* RKYES,'Y' YES 09850000
* RKNO,'N' NO 09900000
RKCRCRETNW,*,1,CH RETAIN ONLY WHILE DATA SET IS CATALOGED 09950000
* RKYES,'Y' YES 10000000
* RKNO,'N' NO 10050000
RKCRCRETNX,*,1,CH RETAIN UNTIL EXPIRED 10100000
* RKYES,'Y' YES 10150000
* RKNO,'N' NO 10200000
RKCRCRETNXD,*,1,CH RETAIN BASED ON EXTRA DAYS SINCE VRS MATCHED 10250000
* RKYES,'Y' YES 10300000
* RKNO,'N' NO 10350000
RKCRCRETNCDD,*,1,CH RETAIN BASED ON BYDAYSCYCLE (ALL COPIES ON
* 1 DAY ARE TREATED AS A CYCLE) 10400000
* RKYES,'Y' YES 10450000
* 10500000

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EDGEXTSY

* RKN0,'N'	NO	10550000
RKRETAND,*1,CH	RETENTION MUST BE ANDED WITH THE NEXT VRS IN	10600000
	THE CHAIN	10650000
* RKEYS,'Y'	YES	10700000
* RKN0,'N'	NO	10750000
SKIP,5	RESERVED	10800000
RKDSNG,*1,CH	DATA SET NAME MASK IS FOR A GDG	10850000
RKG,'Y'	GDG	10900000
RKPG,'P'	PSEUDO-GDG	10950000
RKNG,'N'	NOGDG	11000000
RKLOCTYP,*1,CH	LOCATION TYPE	11050000
RKAUT,'A'	AUTO	11100000
RKMAN,'M'	MANUAL	11150000
RKSTR,'S'	STORE	11200000
RKBLK,' '	BLANK	11250000
RKLOC,*8,CH	NAME OF LOCATION TO BE STORED	11300000
RKNEXT,*8,CH	NAME OF NEXT VRS IN THE CHAIN	11350000
RKCOUNT,*5,CH	VITAL RECORD COUNT (NUMBER OF CYCLES OR	11400000
	ELAPSED DAYS OR VOLUMES TO BE KEPT IN TOTAL)	11450000
* RKSTNUM,*5,CH	STORE KEEP NUMBER (NUMBER OF CYCLES OR DAYS OR	11500000
	VOLUMES TO BE KEPT IN STORE)	11550000
* RKDELAY,*5,CH	NUMBER OF ELAPSED DAYS DELAY BEFORE BEING	11600000
	SELECTED FOR THE FIRST LOCATION	11650000
* RKOWNER,*8,CH	VITAL RECORD OWNER	11700000
RKDELDT,*10,CH	DATE THE VRS IS TO BE DELETED BY RMM	11750000
RKDESC,*30,CH	DESCRIPTION	11800000
RKRELOPT,*8,CH	VRS RELEASE OPTIONS	11850000
RKRELIXD,*1,CH	IGNORE EXPDT	11900000
* RKEYS,'Y'	YES	11950000
* RKN0,'N'	NO	12000000
RKRELSI,*1,CH	SCRATCH IMMEDIATE	12050000
* RKEYS,'Y'	YES	12100000
* RKN0,'N'	NO	12150000
SKIP,6	RESERVED	12200000
*****		12250000
* END OF REPORT EXTRACT VRS RECORD		12300000
*****		12350000
RKRCEND,*	END OF RKEXT	12400000
*		12450000
*****		12500000
* ROEXT: This file maps the information produced for owner		* 12550000
* records in the RMM report extract file.		* 12600000
* In this record the date format depends on the DATEFORM		* 12650000
* selected by EDGHSKP execution parameter or the parmlib		* 12700000
* specified value.		* 12750000
*****		12800000
POSITION,EXTRACT_DATA	start at EXTRACT_DATA	12850000
SKIP,3	RESERVED	12900000
ROOWNER,*8,CH	OWNER ID	12950000
SKIP,36	RESERVED	13000000
*****		13050000
* Start of common fields:		* 13100000
* The common fields are in the same place in each record type		* 13150000
* in the report extract file. This allows common processing of		* 13200000
* these field across multiple record types.		* 13250000
*****		13300000
ROCRDATE,*10,CH	CREATE DATE of owner record	13350000
ROCRTIME,*6,CH	CREATE TIME (HHMMSS) of owner record	13400000
ROCRSID,*8,CH	CREATE SYSTEM ID of owner record	13450000
ROLCDATE,*10,CH	LAST CHANGE DATE of owner record	13500000
ROLCTIME,*6,CH	LAST CHANGE TIME (HHMMSS) of owner record	13550000
ROLUID,*8,CH	LAST CHANGE USER ID of owner record	13600000
ROLCSID,*8,CH	LAST CHANGE SYSTEM ID of owner record	13650000
*****		13700000
* End of common fields		* 13750000
*****		13800000
ROOWNSUR,*20,CH	OWNER LAST NAME	13850000

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ROOWNFST,*,20,CH      OWNER FIRST NAME          13900000
ROOWNDEP,*,40,CH      OWNER DEPARTMENT          13950000
ROOWNAD1,*,40,CH      OWNER ADDRESS LINE 1      14000000
ROOWNAD2,*,40,CH      OWNER ADDRESS LINE 2      14050000
ROOWNAD3,*,40,CH      OWNER ADDRESS LINE 3      14100000
ROOWNTIN,*,8,CH       OWNER INTERNAL TELEPHONE  14150000
ROOWNTEX,*,20,CH      OWNER EXTERNAL TELEPHONE  14200000
ROOWNUID,*,8,CH       OWNER ELECTRONIC USERID   14250000
ROOWNNOD,*,8,CH      OWNER ELECTRONIC NODE NAME 14300000
ROOWNVOL,*,6,CH      TOTAL NUMBER OF OWNED VOLUMES 14350000
*****
* END OF REPORT EXTRACT OWNER RECORD * 14450000
*****
RORCEND,*             END OF ROEXT                14550000
*
*****
* RPEXT:  This file maps the information produced for product * 14700000
* records in the RMM report extract file. * 14750000
* In this record the date format depends on the DATEFORM * 14800000
* selected by EDGHSKP execution parameter or the parmlib * 14850000
* specified value. * 14900000
*****
POSITION,EXTRACT_DATA start at EXTRACT_DATA 15000000
SKIP,3                RESERVED                15050000
RPPPNUM,*,8,CH        PRODUCT NUMBER (NNNN-CCC) 15100000
RPVER,*,6,CH          VERSION/RELEASE/MOD NUMBER 15150000
* (vvrrmm) where vv - version, rr - release,
* mm - modification level 15200000
*
SKIP,30              RESERVED                15300000
*****
* Start of common fields: * 15400000
* The common fields are in the same place in each record type * 15450000
* in the report extract file. This allows common processing of * 15500000
* these field across multiple record types. * 15550000
*****
RPCRDATE,*,10,CH      CREATE DATE of product record 15600000
RPCRTIME,*,6,CH       CREATE TIME (HHMMSS) of product record 15700000
RPCRSID,*,8,CH        CREATE SYSTEM ID of product record 15750000
RPLCDATE,*,10,CH     LAST CHANGE DATE of product record 15800000
RPLCTIME,*,6,CH      LAST CHANGE TIME (HHMMSS) of product record 15850000
RPLCUID,*,8,CH       LAST CHANGE USER ID of product record 15900000
RPLCSID,*,8,CH       LAST CHANGE SYSTEM ID of product record 15950000
*****
* End of common fields * 16050000
*****
RPPPOWN,*,8,CH        PRODUCT OWNER ID          16150000
RPPpname,*,30,CH      PRODUCT NAME              16200000
RPPDESC,*,30,CH      PRODUCT DESCRIPTION       16250000
RPVOLNO,*,4,CH        NUMBER OF PRODUCT VOLUMES 16300000
*****
* END OF REPORT EXTRACT PRODUCT RECORD * 16400000
*****
RPRCEND,*             END OF RPEXT                16500000
*
*****
* RREXT:  This file maps the information produced for rack number * 16650000
* records in the RMM report extract file. * 16700000
* In this record the date format depends on the DATEFORM * 16750000
* selected by EDGHSKP execution parameter or the parmlib * 16800000
* specified value. * 16850000
*****
POSITION,EXTRACT_DATA start at EXTRACT_DATA 16950000
RRTYPE2,*,1,CH        RACK RECORD ID           17000000
RRTYPEE,'E'           EMPTY RACK                17050000
RRTYPEF,'F'           FREE/SCRATCH RACK        17100000
RRTYPEU,'U'           IN USE RACK              17150000
SKIP,2                RESERVED                17200000

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RRRACK,*,6,CH          RACK NUMBER          17250000
RRNAME,*,8,CH          MEDIA NAME          17300000
  RRUNIT,=,8,CH        Old name for RRNAME field 17350000
SKIP,30                RESERVED          17400000
*****                17450000
* Start of common fields:                * 17500000
* The common fields are in the same place in each record type * 17550000
* in the report extract file. This allows common processing of * 17600000
* these field across multiple record types. * 17650000
*****                17700000
RRCRDATE,*,10,CH       CREATE DATE of rack record 17750000
RRCRTIME,*,6,CH        CREATE TIME (HHMMSS) of rack record 17800000
RRCRSID,*,8,CH         CREATE SYSTEM ID of rack record 17850000
RRLCDATE,*,10,CH      LAST CHANGE DATE of rack record 17900000
RRLCTIME,*,6,CH       LAST CHANGE TIME (HHMMSS) of rack record 17950000
RRLCUID,*,8,CH        LAST CHANGE USER ID of rack record 18000000
RRLCSID,*,8,CH        LAST CHANGE SYSTEM ID of rack record 18050000
*****                18100000
* End of common fields                    * 18150000
*****                18200000
RRVOLSER,*,6,CH        ASSIGNED VOLUME SERIAL NUMBER 18250000
*****                18300000
* END OF REPORT EXTRACT RACK NUMBER RECORD * 18350000
*****                18400000
RRRCEND,*              END OF RREXT          18450000
*                                          18500000
*****                18550000
* RSEXT: This file maps the information produced for bin number * 18600000
* records in the RMM report extract file. * 18650000
* In this record the date format depends on the DATEFORM * 18700000
* selected by EDGHSKP execution parameter or the parmlib * 18750000
* specified value. * 18800000
*****                18850000
POSITION,EXTRACT_DATA start at EXTRACT_DATA 18900000
RSTYPE2,*,1,CH         BIN RECORD ID          18950000
  RSTYPER,'E'          EMPTY BIN              19000000
  RSTYPES,'U'          ASSIGNED BIN           19050000
RSTMSTID,*,8,CH       STORAGE LOCATION NAME 19100000
SKIP,1                RESERVED              19150000
RSBINNO,*,6,CH        BIN NUMBER             19200000
RSBMEDN,*,8,CH        BIN MEDIA NAME         19250000
SKIP,23               RESERVED              19300000
*****                19350000
* Start of common fields:                * 19400000
* The common fields are in the same place in each record type * 19450000
* in the report extract file. This allows common processing of * 19500000
* these field across multiple record types. * 19550000
*****                19600000
RSCRDATE,*,10,CH      CREATE DATE of bin record 19650000
RSCRTIME,*,6,CH       CREATE TIME (HHMMSS) of bin record 19700000
RSCRSID,*,8,CH        CREATE SYSTEM ID of bin record 19750000
RSLCDATE,*,10,CH     LAST CHANGE DATE of bin record 19800000
RSLCTIME,*,6,CH      LAST CHANGE TIME (HHMMSS) of bin record 19850000
RSLCUID,*,8,CH       LAST CHANGE USER ID of bin record 19900000
RSLCSID,*,8,CH       LAST CHANGE SYSTEM ID of bin record 19950000
*****                20000000
* End of common fields                    * 20050000
*****                20100000
RSVOLSER,*,6,CH       ASSIGNED VOLUME SERIAL NUMBER 20150000
RSMOVINGINVOL,*,6,CH Moving-In Volume      §SCA 20162500
RSMOVINGOUTVOL,*,6,CH Moving-Out Volume    §SCA 20175000
RSOLDVOLUME,*,6,CH   Old Volume            §SCA 20187500
*****                20200000
* END OF REPORT EXTRACT STORAGE LOCATION BIN RECORD 20250000
*****                20300000
RSRCEND,*            END OF RSEXT          20350000
*                                          20400000

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***** 20450000
* RVEXT: This file maps the information produced for volume * 20500000
* records in the RMM report extract file. * 20550000
* In this record the date format depends on the DATEFORM * 20600000
* selected by EDGHSKP execution parameter or the parmlib * 20650000
* specified value. * 20700000
***** 20750000
POSITION,EXTRACT_DATA start at EXTRACT_DATA 20800000
SKIP,3 RESERVED 20850000
RVVOLSER,*,6,CH VOLUME SERIAL NUMBER 20900000
RVPVOL,*,6,CH PREVIOUS VOLUME IN SEQUENCE 20950000
RVNVOL,*,6,CH NEXT VOLUME IN SEQUENCE 21000000
SKIP,6 RESERVED 21050000
***** 21100000
* RVMDMVID: Is a unique token assigned to every volume and every * 21150000
* data set in a multi-volume set. * 21200000
***** 21250000
RVMDMVID,*,8,CH MULTI-DSET MULT-VOL ID 21300000
SKIP,12 RESERVED 21350000
***** 21400000
* Start of common fields: * 21450000
* The common fields are in the same place in each record type * 21500000
* in the report extract file. This allows common processing of * 21550000
* these field across multiple record types. * 21600000
***** 21650000
RVCRDATE,*,10,CH CREATE DATE of volume record 21700000
RVCRTIME,*,6,CH CREATE TIME HHMMSS of volume record 21750000
RVCRSID,*,8,CH CREATE SYSTEM ID of volume record 21800000
RVLCDATE,*,10,CH LAST CHANGE DATE of volume record 21850000
RVLCIME,*,6,CH LAST CHANGE TIME HHMMSS of volume record 21900000
RVLCUID,*,8,CH LAST CHANGE USER ID of volume record 21950000
RVLCSID,*,8,CH LAST CHANGE SYSTEM ID of volume record 22000000
***** 22050000
* End of common fields * 22100000
***** 22150000
RVEXPDTO,*,10,CH EXPIRATION DATE - original 22200000
RVEXPDT,*,10,CH EXPIRATION DATE - current 22250000
RVDEN,*,4,CH RECORDING DENSITY 22300000
RVCOMP,*,1,CH COMPACTION USED 22350000
RVYES,'Y' YES 22400000
RVNO,'N' NO 22450000
SKIP,4 RESERVED WAS NO DSN ON VOLUME $LLC 22500000
RVTUSE,*,10,CH TAPE USAGE IN KBYTES 22550000
RVUSE,*,4,CH VOLUME USE COUNT 22600000
SKIP,4 RESERVED WAS LABNO $LLC 22650000
RVSTORID,*,8,CH CURRENT LOCATION NAME 22700000
RVSHL,'SHELF' SHELF 22750000
RVLOC,'LOCAL' LOCAL 22800000
RVREM,'REMOTE' REMOTE 22850000
** CAN ALSO BE: 22900000
** DISTANT INSTALLATION DEFINED STORE 22950000
** SMS-DEFINED LIBRARY NAME 23000000
RVDEST,*,8,CH DESTINATION NAME 23050000
* RVLOC,'LOCAL' LOCAL 23100000
* RVREM,'REMOTE' REMOTE 23150000
** CAN ALSO BE: 23200000
** DISTANT INSTALLATION DEFINED STORE 23250000
** SMS-DEFINED LIBRARY NAME 23300000
***** 23350000
* Bin Numbers: If a volume is not moving (RVTRANS=N), and is in a * 23400000
* storage location, RVSTBIN contains the current bin * 23450000
* number and RVOBIN the bin number in the previous * 23500000
* location. * 23550000
* If a volume is moving (RVTRANS=Y), and moving to a * 23600000
* storage location, RVSTBIN contains the target bin * 23650000
* number and RVOBIN the bin number in the source * 23700000
* location. * 23750000

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EDGEXTSY

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***** 23800000
RVSTBIN,*,6,CH      BIN NUMBER          23850000
RVOBIN,*,6,CH      PREVIOUS BIN NUMBER 23900000
RVSTDATE,*,10,CH   MOVEMENT TRACKING DATE 23950000
RVRETDAT,*,10,CH   RETENTION DATE CALCULATED BY VRS PROCESSING 24000000
RVLONLOC,*,8,CH    LOAN LOCATION        24050000
RVOLNLOC,*,8,CH    PREVIOUS LOAN LOCATION 24100000
RVLRDDAT,*,10,CH   DATE VOLUME LAST READ 24150000
RVLWTDAT,*,10,CH   DATE VOLUME LAST WRITTEN 24200000
***** 24250000
* Assigned date and time: * 24300000
*   These fields are set each time a volume changes either from * 24350000
*   or to scratch status. * 24400000
***** 24450000
RVASDATE,*,10,CH   ASSIGNED DATE        24500000
RVASTIME,*,6,CH    ASSIGNED TIME HHMMSS 24550000
RVOWNID,*,8,CH     VOLUME OWNER USERID 24600000
RVCRUID,*,8,CH     CREATING USERID      24650000
RVCRJOB,*,8,CH     CREATING JOBNAME     24700000
RVSECLEV,*,8,CH    SECURITY LEVEL - SHORT 24750000
RVSECLNG,*,30,CH   SECURITY LEVEL - LONG 24800000
RVVOLSEQ,*,4,CH    VOLUME SEQUENCE NUMBER 24850000
RVSTATUS,*,8,CH    VOLUME STATUS         24900000
  RVMST,'MASTER'   MASTER                24950000
  RVUSR,'USER'     USER                  25000000
  RVSCR,'SCRATCH'  SCRATCH                25050000
  RVINI,'INIT'     INIT                  25100000
  RVENT,'ENTRY'    ENTRY                  25150000
RVPENDRS,*,1,CH    VOLUME PENDING RELEASE 25200000
* RVMST,'Y'        YES                    25250000
* RVNO,'N'         NO                     25300000
RVVRS,*,1,CH       VOLUME RETAINED BY VRS 25350000
* RVMST,'Y'        YES                    25400000
* RVNO,'N'         NO                     25450000
RVLOAN,*,1,CH      VOLUME ON LOAN        25500000
* RVMST,'Y'        YES                    25550000
* RVNO,'N'         NO                     25600000
RVOPEN,*,1,CH      VOLUME IS OPENED      25650000
* RVMST,'Y'        YES                    25700000
* RVNO,'N'         NO                     25750000
RVOCER,*,1,CH      VOLUME RECORDED BY O/C/EOV 25800000
* RVMST,'Y'        YES                    25850000
* RVNO,'N'         NO                     25900000
RVDEFRET,*,1,CH    PARMLIB DEFAULT RETENTION USED TO GENERATE 25950000
*                               THE VOLUME EXPDT 26000000
* RVMST,'Y'        YES                    26050000
* RVNO,'N'         NO                     26100000
RVPTAPE,*,1,CH     PROGRAM PRODUCT TAPE 26150000
* RVMST,'Y'        YES                    26200000
* RVNO,'N'         NO                     26250000
***** 26300000
* Labels: The RVLABEL field provides information about what label * 26350000
*   types may be written on the volume. If BLP output has * 26400000
*   been used, the volume may no longer match this * 26450000
*   information. Any BLP output beyond file 1 on a volume * 26500000
*   is not recorded by RMM. * 26550000
***** 26600000
RVLABEL,*,3,CH     LABEL TYPE            26650000
  RVSL,'SL'        SL                26700000
  RVAL,'AL'        AL                26750000
  RVNL,'NL'        NL                26800000
  RVSUL,'SUL'      SUL               26850000
  RVAUL,'AUL'      AUL               26900000
RVBLP,*,1,CH       VOLUME LAST WRITTEN BLP 26950000
* RVMST,'Y'        YES                27000000
* RVNO,'N'         NO                27050000
***** 27100000

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* Release Actions: The following 5 fields list the actions to be * 27150000
* set for the volume when it is released. These are * 27200000
* not the current actions. See RSACTION for the * 27250000
* pending actions. * 27300000
*****
RVRETS,* ,8,CH RETURN ACTION 27350000
RVOWN,'OWNER' OWNER 27400000
* RVSCR,'SCRATCH' SCRATCH 27450000
RVREPL,* ,1,CH REPLACE ON RELEASE 27500000
* RYES,'Y' YES 27550000
* RVNO,'N' NO 27600000
RVINIT,* ,1,CH REINITIALISE 27650000
* RYES,'Y' YES 27700000
* RVNO,'N' NO 27750000
RVERASE,* ,1,CH SECURITY ERASE 27800000
* RYES,'Y' YES 27850000
* RVNO,'N' NO 27900000
RVNTFY,* ,1,CH NOTIFY OWNER 27950000
* RYES,'Y' YES 28000000
* RVNO,'N' NO 28050000
RVOWNAC,* ,1,CH OWNER ACCESS 28100000
RVRD,'R' READ 28150000
RVUPD,'U' UPDATE 28200000
RVADD,'A' ADD 28250000
RVUSERAC,* ,1,CH USER ACCESS 28300000
* RVRD,'R' READ 28350000
* RVUPD,'U' UPDATE 28400000
RVVMUSE,* ,1,CH VM USE 28450000
* RYES,'Y' YES 28500000
* RVNO,'N' NO 28550000
RVMVSUSE,* ,1,CH MVS USE 28600000
* RYES,'Y' YES 28650000
* RVNO,'N' NO 28700000
RVNAME,* ,8,CH MEDIA NAME 28750000
RVUNIT,* ,8,CH Old name for RVNAME field 28800000
RVRACK,* ,6,CH RACK NUMBER 28850000
RVTRERR,* ,4,CH TEMPORARY READ ERRORS 28900000
RVTWERR,* ,4,CH TEMPORARY WRITE ERRORS 28950000
RVPRERR,* ,4,CH PERMANENT READ ERRORS 29000000
RVPWERR,* ,4,CH PERMANENT WRITE ERRORS 29050000
***** 29100000
* Product Information: Includes number, release and feature code * 29150000
***** 29200000
RVPPNUM,* ,8,CH PROGRAM PRODUCT NUMBER 29250000
RVVER,* ,6,CH VERSION/RELEASE/MOD NUMBER 29300000
RVFEAT,* ,4,CH FEATURE CODE 29350000
RVACCINF,* ,40,CH ACCOUNTING INFORMATION 29400000
RVUSEFLD,* ,30,CH USER DESCRIPTION 29450000
RVACCLST,* ,3,CH NUMBER OF ACCESS LIST ENTRIES 29500000
RVAUTIDS,* ,96,CH AUTHORISED USER IDS AREA 29550000
RVHLOC,* ,8,CH HOME LOCATION NAME 29600000
RVTRANS,* ,1,CH VOLUME IN TRANSIT 29650000
* RYES,'Y' YES 29700000
* RVNO,'N' NO 29750000
RVLOCTYP,* ,1,CH LOCATION TYPE 29800000
RVAUT,'A' AUTO 29850000
RVMAN,'M' MANUAL 29900000
RVSTR,'S' STORE 29950000
RVBLK,' ' BLANK 30000000
RVDESTYP,* ,1,CH DESTINATION TYPE 30050000
* RVAUT,'A' AUTO 30100000
* RVMAN,'M' MANUAL 30150000
* RVSTR,'S' STORE 30200000
* RVBLK,' ' BLANK 30250000
RVOLOC,* ,8,CH THE PREVIOUS LOCATION NAME 30300000
RVSGNAME,* ,8,CH STORAGE GROUP NAME 30350000
RVMEDREC,* ,8,CH VOLUME RECORDING FORMAT 30400000
30450000

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EDGEXTSY

RV18,'18TRACK'	18 TRACK	30500000
RV36,'36TRACK'	36 TRACK	30550000
RV128,'128TRACK'	128 TRACK	30600000
RV256,'256TRACK'	256 TRACK	30650000
RV384,'384TRACK'	384 TRACK	§SEA 30675000
RVMEDTY,* ,8,CH	VOLUME MEDIA TYPE	30700000
RVAST,'*'	*	30750000
RVCST,'CST'	CST	30800000
RVEC,'ECCST'	ECCST	30850000
RVHP,'HPCT'	HPCT	30900000
RVEH,'EHPCT'	EHPCT	30950000

* EHPCT IS RESERVED FOR EXTENDED HIGH PERFORMANCE	*	31000000
* CARTRIDGE TAPE.	*	31050000

* CARTRIDGE TAPE.	*	31100000

RVMEDCMP,* ,8,CH	COMPACTION TECHNIQUE	31150000
* RVAST,'*'	*	31200000
* RVNON,'NONE'	NONE	31250000
* RVMVYES,'Y'	YES	31300000
RVMEDATR,* ,8,CH	SPECIAL ATTRIBUTES	31350000
* RVNON,'NONE'	NONE	31400000
* RVRDC,'RDCOMPAT'	RDCOMPAT	31450000
RVDSNAM1,* ,44,CH	FIRST FILE DATA SET NAME	31500000
RVMMODE,* ,1,CH	MOVE MODE	31550000
* RVAUT,'A'	AUTO	31600000
* RVMAN,'M'	MANUAL	31650000
RVDSNREC,* ,1,CH	DS RECORDING	31700000
* RVMYES,'Y'	YES	31750000
* RVNO,'N'	NO	31800000
RVALVERS,* ,2,CH	ANSI LABEL VERSION	31850000
RVALCUR,=,1,CH	CURRENT LABEL VERSION	§LLC 31900000
RVALREQ,* ,1,CH	REQUIRED LABEL VERSION	31950000
RVBMEDN,* ,8,CH	BIN MEDIA NAME	32000000
RVOBMEDN,* ,8,CH	PREVIOUS BIN MEDIA NAME	32050000
RVNLOC,* ,8,CH	REQUIRED LOCATION NAME - AS DETERMINED BY	32100000
* VRS OR COMMAND		32150000
RVLUDEV,* ,4,CH	LAST USED DRIVE	32200000

* Pending Actions: The following fields list the actions required	*	32250000
* for the volume. See RVRETS for the actions set	*	32300000
* when the volume is released.	*	32350000

RVACTION,* ,8,CH	PENDING ACTIONS	32400000
RVACTSCR,=,1,CH	RETURN TO SCRATCH	32450000
* RVMYES,'Y'	YES	32500000
* RVNO,'N'	NO	32550000
RVACTREP,* ,1,CH	REPLACE VOLUME	32600000
* RVMYES,'Y'	YES	32650000
* RVNO,'N'	NO	32700000
RVACTRET,* ,1,CH	RETURN TO OWNER	32750000
* RVMYES,'Y'	YES	32800000
* RVNO,'N'	NO	32850000
RVACTINI,* ,1,CH	INITIALIZE	32900000
* RVMYES,'Y'	YES	32950000
* RVNO,'N'	NO	33000000
RVACTER,* ,1,CH	ERASE	33050000
* RVMYES,'Y'	YES	33100000
* RVNO,'N'	NO	33150000
RVACTNOT,* ,1,CH	NOTIFY	33200000
* RVMYES,'Y'	YES	33250000
* RVNO,'N'	NO	33300000
SKIP,2	RESERVED	33350000
RVABEND,* ,1,CH	DATA SET CLOSED BY ABEND	33400000
* RVMYES,'Y'	YES	33450000
* RVNO,'N'	NO	33500000
RVHOMTYP,* ,1,Ch	HOME LOCATION TYPE	33550000
* RVAUT,'A'	AUTO	33600000
		33650000
		33700000
		33750000

* RVMAN,'M'	MANUAL		33800000
* RVBLK,' '	BLANK		33850000
RVNEXTYP,*1,CH	NEXT LOCATION TYPE		33900000
* RVAUT,'A'	AUTO		33950000
* RVMAN,'M'	MANUAL		34000000
* RVSTR,'S'	STORE		34050000
* RVBLK,' '	BLANK		34100000
RVVOLTYPE,*1,CH	VOLUME TYPE		34150000
MVVOLTYPE_PHYSICAL,'0'	VOLUME TYPE PHYSICAL		34200000
MVVOLTYPE_LOGICAL,'1'	VOLUME TYPE LOGICAL		34250000
MVVOLTYPE_STACKED,'2'	VOLUME TYPE STACKED		34300000
RVVRSREL,*8,CH	VRS RELEASE OPTIONS		34350000
RVRELIXD,=,1,CH	IGNORE EXPDT		34400000
* RVYES,'Y'	YES		34450000
* RVNO,'N'	NO		34500000
RVRELSI,*1,CH	SCRATCH IMMEDIATE		34550000
* RVYES,'Y'	YES		34600000
* RVNO,'N'	NO		34650000
SKIP,6	RESERVED		34700000
RVCONTR,*16,CH	IN CONTAINER NAME		34750000
RVRQPTY,*4,CH	MOVEMENT PRIORITY		34800000
RVCAPACITY,*10,CH	Volume capacity in MBytes	\$05A	34825000
RVRBYSET,*1,CH	VOLUE RETAINED BY SET		34850000
RVSTACKVOL_ENABLED,*1,CH	STACKED VOLUME RECORD ENABLED		34900000
*	AND SYNCHRONIZED		34950000
RVEXPTOKEN,*8,CH	UNIQUE VALUE CREATED AT START OF		35000000
*	EXPORT TO A NEW STACKED VOLUME		35050000
* SKIP,2	RESERVED	\$LLD	35100000
RVSTACKED_VOLCOUNT,*10,CH	COUNT OF VOLUMES STACKED ON A	\$03C	35150000
*	VOLUME		35158300
RVPERCENT,*3,CH	VOLUME PERCENTAGE FULL	\$LLA	35162400
RVDSNO,*5,CH	NUMBER OF DATASETS ON VOLUME NEW	\$LLA	35166600
RVLABNO1,*5,CH	LABEL NO OF FIRST FILE NEW	\$LLA	35183200
RVDCRSID,*8,CH	First file creation system ID	\$05A	35222100
RVREST,*1,CH	RESERVED FOR FUTURE USE	\$05A	35261000
*			35270700
RVDESTBIN,*6,CH	Destination Bin Number	\$SCA	35280400
RVDESTBINMEDIA,*8,CH	Destination Bin Media Name	\$SCA	35290100
RVVOL1,*6,CH	VOL1 label volser	\$LSA	35295000
*****			35300000
* END OF REPORT EXTRACT VOLUME RECORD		*	35350000
*****			35400000
RVRCEND,*	END OF RVEXT		35450000
*****			35500000
* RXEXT: This file maps the information produced for volume		*	35516600
* records in the RMM report extract file.		*	35533200
* In this record the date format depends on the DATEFORM		*	35549800
* selected by EDGHSKP execution parameter or the parmlib		*	35566400
* specified value.		*	35583000
*****			35600000
POSITION,EXTRACT_DATA	start at EXTRACT_DATA	\$04A	35650000
SKIP,3	Reserved	\$04A	35700000
RXVOLSER,*6,CH	Volume serial number	\$04A	35750000
RXVPVOL,*6,CH	Previous volume in sequence	\$04A	35800000
RXVNVOL,*6,CH	Next volume in sequence	\$04A	35850000
SKIP,6	Reserved	\$04A	35900000
*****		\$04A	35950000
* RXMDMVID: Is a unique token assigned to every volume and every		*\$04A	36000000
* data set in a multi-volume set.		*\$04A	36050000
*****		\$04A	36100000
RXVMDMVID,*8,CH	Multi-data set multi volume id	*\$04A	36150000
SKIP,12	Reserved	*\$04A	36200000
*****		\$04A	36250000
* Start of common fields:		*\$04A	36300000
* The common fields are in the same place in each record type		*\$04A	36350000
* in the report extract file. This allows common processing of		*\$04A	36400000
* these field across multiple record types.		*\$04A	36450000

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*****§04A 36500000
RXVCRDATE,*,10,CH      Create date of volume record      §04A 36550000
RXVCRTIME,*,6,CH      Create time HHMMSS of volume record §04A 36600000
RXVCRSID,*,8,CH      Create system id of volume record  §04A 36650000
RXVLCDATE,*,10,CH     Last change date of volume record  §04A 36700000
RXVLCIME,*,6,CH      Last change time HHMMSS of volume record §04A 36750000
RXVLCUID,*,8,CH      Last change user id of volume record §04A 36800000
RXVLCSID,*,8,CH      Last change system id of volume record §04A 36850000
*****§04A 36900000
* End of common fields                                     *§04A 36950000
*****§04A 37000000
RXVEXPDTO,*,10,CH     Expiration date - original        §04A 37050000
RXVEXPDT,*,10,CH     Expiration date - current         §04A 37100000
RXVDEN,*,4,CH        Recording density                  §04A 37150000
RXVCOMP,*,1,CH       Compaction used                    §04A 37200000
RXVYES,'Y'           Yes                                §04A 37250000
RXVNO,'N'           No                                §04A 37300000
SKIP,4              Reserved                            §K2C 37350000
RXVTUSE,*,10,CH     Tape usage in kbytes              §04A 37400000
RXVUSE,*,4,CH       Volume use count                  §04A 37450000
SKIP,4              Reserved                            §K2C 37500000
RXVSTORID,*,8,CH    Current location name            §04A 37550000
RXVSHL,'SHELF'      Shelf                              §04A 37600000
RXVLOC,'LOCAL'      Local                              §04A 37650000
RXVREM,'REMOTE'     Remote                             §04A 37700000
** Can also be:                                          §04A 37750000
** Distant installation defined store                    §04A 37800000
** SMS-defined library name                             §04A 37850000
RXVDEST,*,8,CH      Destination name                  §04A 37900000
* RXVLOC,'LOCAL'    Local                              §04A 37950000
* RXVREM,'REMOTE'   Remote                             §04A 38000000
** Can also be:                                          §04A 38050000
** Distant installation defined store                    §04A 38100000
** SMS-defined library name                             §04A 38150000
*****§04A 38200000
* Bin Numbers: If a volume is not moving (RXTRANS=N), and is in *§04A 38250000
* a storage location, RXSTBIN contains the current *§04A 38300000
* bin number and RXOBIN the bin number in the *§04A 38350000
* previous location. *§04A 38400000
* If a volume is moving (RXTRANS=Y), and moving to *§04A 38450000
* a storage location, RXSTBIN contains the target *§04A 38500000
* bin number and RXOBIN the bin number in the *§04A 38550000
* source location. *§04A 38600000
*****§04A 38650000
RXVSTBIN,*,6,CH     Bin number                        §04A 38700000
RXVOBIN,*,6,CH     Previous bin number                §04A 38750000
RXVSTDATE,*,10,CH  Movement tracking date            §04A 38800000
RXVRETDAT,*,10,CH  Retention date calculated by VRS process. §04A 38850000
RXVLONLOC,*,8,CH   Loan location                      §04A 38900000
RXVOLNLOC,*,8,CH   Previous loan location             §04A 38950000
RXVLRDDAT,*,10,CH  Date volume last read             §04A 39000000
RXVLWTDAT,*,10,CH  Date volume last written          §04A 39050000
*****§04A 39100000
* Assigned date and time: *§04A 39150000
* These fields are set each time a volume changes either from *§04A 39200000
* or to scratch status. *§04A 39250000
*****§04A 39300000
RXVASDATE,*,10,CH  Assigned date                      §04A 39350000
RXVASTIME,*,6,CH  Assigned time HHMMSS              §04A 39400000
RXVOWNID,*,8,CH   Volume owner userid               §04A 39450000
RXVCRUID,*,8,CH   Creating userid                   §04A 39500000
RXVCRJOB,*,8,CH   Creating jobname                  §04A 39550000
RXVSECLEV,*,8,CH  Security level - short            §04A 39600000
RXVSECLNG,*,30,CH Security level - long             §04A 39650000
RXVVOLSEQ,*,4,CH  Volume sequence number           §04A 39700000
RXVSTATUS,*,8,CH  Volume status                     §04A 39750000
RXVMST,'MASTER'   Master                            §04A 39800000

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RXVUSR,'USER'	User	\$04A	39850000
RXVSCR,'SCRATCH'	Scratch	\$04A	39900000
RXVINI,'INIT'	Init	\$04A	39950000
RXVENT,'ENTRY'	Entry	\$04A	40000000
RXVPENDRS,*1,CH	Volume pending release	\$04A	40050000
* RXVYES,'Y'	Yes	\$04A	40100000
* RXVNO,'N'	No	\$04A	40150000
RXVVRS,*1,CH	Volume retained by VRS	\$04A	40200000
* RXVYES,'Y'	Yes	\$04A	40250000
* RXVNO,'N'	No	\$04A	40300000
RXVLOAN,*1,CH	Volume on loan	\$04A	40350000
* RXVYES,'Y'	Yes	\$04A	40400000
* RXVNO,'N'	No	\$04A	40450000
RXVOPEN,*1,CH	Volume is opened	\$04A	40500000
* RXVYES,'Y'	Yes	\$04A	40550000
* RXVNO,'N'	No	\$04A	40600000
RXVOCER,*1,CH	Volume recorded by O/C/EOV	\$04A	40650000
* RXVYES,'Y'	Yes	\$04A	40700000
* RXVNO,'N'	No	\$04A	40750000
RXVDEFRET,*1,CH	Parmlib default retention used to	\$04A	40800000
*	generate the volume EXPDT	\$04A	40850000
* RXVYES,'Y'	Yes	\$04A	40900000
* RXVNO,'N'	No	\$04A	40950000
RXVPPTAPE,*1,CH	Program product tape	\$04A	41000000
* RXVYES,'Y'	Yes	\$04A	41050000
* RXVNO,'N'	No	\$04A	41100000
*****		\$04A	41150000
* Labels: The RXLABEL field provides information about what label		\$04A	41200000
* types may be written on the volume. If BLP output has		\$04A	41250000
* been used, the volume may no longer match this		\$04A	41300000
* information. Any BLP output beyond file 1 on a volume		\$04A	41350000
* is not recorded by RMM.		\$04A	41400000
*****		\$04A	41450000
RXVLABEL,*3,CH	Label type	\$04A	41500000
RXVSL,'SL'	SL	\$04A	41550000
RXVAL,'AL'	AL	\$04A	41600000
RXVNL,'NL'	NL	\$04A	41650000
RXVSUL,'SUL'	SUL	\$04A	41700000
RXVAUL,'AUL'	AUL	\$04A	41750000
RXVBLP,*1,CH	Volume last written BLP	\$04A	41800000
* RXVYES,'Y'	Yes	\$04A	41850000
* RXVNO,'N'	No	\$04A	41900000
*****		\$04A	41950000
* Release Actions: The following 5 fields list the actions to		\$04A	42000000
* be set for the volume when it is released. These		\$04A	42050000
* are not the current actions. See RXACTION for		\$04A	42100000
* the pending actions.		\$04A	42150000
*****		\$04A	42200000
RXVRETS,*8,CH	Return action	\$04A	42250000
RXVOWN,'OWNER'	Owner	\$04A	42300000
* RXVSCR,'SCRATCH'	Scratch	\$04A	42350000
RXVREPL,*1,CH	Replace on release	\$04A	42400000
* RXVYES,'Y'	Yes	\$04A	42450000
* RXVNO,'N'	No	\$04A	42500000
RXVINIT,*1,CH	Reinitialise	\$04A	42550000
* RXVYES,'Y'	Yes	\$04A	42600000
* RXVNO,'N'	No	\$04A	42650000
RXVERASE,*1,CH	Security erase	\$04A	42700000
* RXVYES,'Y'	Yes	\$04A	42750000
* RXVNO,'N'	No	\$04A	42800000
RXVNTFY,*1,CH	Notify owner	\$04A	42850000
* RXVYES,'Y'	Yes	\$04A	42900000
* RXVNO,'N'	No	\$04A	42950000
RXVOWNAC,*1,CH	Owner access	\$04A	43000000
RXVRD,'R'	Read	\$04A	43050000
RXVUPD,'U'	Update	\$04A	43100000
RXVADD,'A'	Add	\$04A	43150000

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RXVUSERAC,* ,1,CH	User access	§04A	43200000
* RXVRD,'R'	Read	§04A	43250000
* RXVUPD,'U'	Update	§04A	43300000
RXVMUSE,* ,1,CH	VM use	§04A	43350000
* RXVYES,'Y'	Yes	§04A	43400000
* RXVNO,'N'	No	§04A	43450000
RXVMVSUSE,* ,1,CH	MVS use	§04A	43500000
* RXVYES,'Y'	Yes	§04A	43550000
* RXVNO,'N'	No	§04A	43600000
RXVNAME,* ,8,CH	Media name	§04A	43650000
RXVUNIT,=,8,CH	Old name for RXVNAME field	§04A	43700000
RXVRACK,* ,6,CH	Rack number	§04A	43750000
RXVTRERR,* ,4,CH	Temporary read errors	§04A	43800000
RXVTWERR,* ,4,CH	Temporary write errors	§04A	43850000
RXVPRERR,* ,4,CH	Permanent read errors	§04A	43900000
RXVPWERR,* ,4,CH	Permanent write errors	§04A	43950000
*****		§04A	44000000
* Product Information: Includes number, release and feature code		*§04A	44050000
*****		§04A	44100000
RXVPPNUM,* ,8,CH	Program product number	§04A	44150000
RXVER,* ,6,CH	Version/Release/Mod number	§04A	44200000
RXVFEAT,* ,4,CH	Feature code	§04A	44250000
RXVACCINF,* ,40,CH	Accounting information	§04A	44300000
RXVUSEFLD,* ,30,CH	User description	§04A	44350000
RXVACCLST,* ,3,CH	Number of access list entries	§04A	44400000
RXVAUTIDS,* ,96,CH	Authorised user ids area	§04A	44450000
RXVHLOC,* ,8,CH	Home location name	§04A	44500000
RXVTRANS,* ,1,CH	Volume in transit	§04A	44550000
* RXVYES,'Y'	Yes	§04A	44600000
* RXVNO,'N'	No	§04A	44650000
RXVLOCTYP,* ,1,CH	Location type	§04A	44700000
RXVAUT,'A'	Auto	§04A	44750000
RXVMAN,'M'	Manual	§04A	44800000
RXVSTR,'S'	Store	§04A	44850000
RXVBLK,' '	Blank	§04A	44900000
RXVDESTYP,* ,1,CH	Destination type	§04A	44950000
* RXVAUT,'A'	Auto	§04A	45000000
* RXVMAN,'M'	Manual	§04A	45050000
* RXVSTR,'S'	Store	§04A	45100000
* RXVBLK,' '	Blank	§04A	45150000
RXVOLOC,* ,8,CH	The previous location name	§04A	45200000
RXVSGNAME,* ,8,CH	Storage group name	§04A	45250000
RXVMEDREC,* ,8,CH	Volume recording format	§04A	45300000
RXV18,'18TRACK'	18 Track	§04A	45350000
RXV36,'36TRACK'	36 Track	§04A	45400000
RXV128,'128TRACK'	128 Track	§04A	45450000
RXV256,'256TRACK'	256 Track	§04A	45500000
RXV384,'384TRACK'	384 Track	§SEA	45525000
RXVMEDTY,* ,8,CH	Volume media type	§04A	45550000
RXVAST,'*'	*	§04A	45600000
RXVCST,'CST'	CST	§04A	45650000
RXVEC,'ECCST'	ECCST	§04A	45700000
RXVHP,'HPCT'	HPCT	§04A	45750000
RXVEH,'EHPCT'	EHPCT	§04A	45800000
*****		§04A	45850000
* EHPCT IS RESERVED FOR EXTENDED HIGH PERFORMANCE		*§04A	45900000
* CARTRIDGE TAPE.		*§04A	45950000
*****		§04A	46000000
RXVMEDCMP,* ,8,CH	Compaction technique	§04A	46050000
* RXVAST,'*'	*	§04A	46100000
RXVNON,'NONE'	None	§04A	46150000
* RXVYES,'Y'	Yes	§04A	46200000
RXVMEDATR,* ,8,CH	Special attributes	§04A	46250000
* RXVNON,'NONE'	None	§04A	46300000
RXVRDC,'RDCOMPAT'	RDCOMPAT	§04A	46350000
RXVDSNAM1,* ,44,CH	First file data set name	§04A	46400000
RXVMVMODE,* ,1,CH	Move mode	§04A	46450000

* RXVAUT,'A'	Auto	\$04A	46500000
* RXVMAN,'M'	Manual	\$04A	46550000
RXVDSNREC,*,1,CH	Data set recording	\$04A	46600000
* RXVYES,'Y'	Yes	\$04A	46650000
* RXVNO,'N'	No	\$04A	46700000
RXVALVERS,*,2,CH	Ansi label version	\$04A	46750000
RXVALCUR,=,1,CH	Current label version	\$04A	46800000
RXVALREQ,*,1,CH	Required label version	\$04A	46850000
RXVBMEDN,*,8,CH	Bin media name	\$04A	46900000
RXVOBMEDN,*,8,CH	Previous bin media name	\$04A	46950000
RXVNLOC,*,8,CH	Required location name - as determined by	\$04A	47000000
* VRS or command		\$04A	47050000
RXVLUDEV,*,4,CH	Last used drive	\$04A	47100000
*****		\$04A	47150000
* Pending Actions: The following fields list the actions required*		\$04A	47200000
* for the volume. See RXRETS for the actions set		\$04A	47250000
* when the volume is released.		\$04A	47300000
*****		\$04A	47350000
RXVACTION,*,8,CH	Pending actions	\$04A	47400000
RXVACTSCR,=,1,CH	Return to scratch	\$04A	47450000
* RXVYES,'Y'	Yes	\$04A	47500000
* RXVNO,'N'	No	\$04A	47550000
RXVACTREP,*,1,CH	Replace volume	\$04A	47600000
* RXVYES,'Y'	Yes	\$04A	47650000
* RXVNO,'N'	No	\$04A	47700000
RXVACTRET,*,1,CH	Return to owner	\$04A	47750000
* RXVYES,'Y'	Yes	\$04A	47800000
* RXVNO,'N'	No	\$04A	47850000
RXVACTINI,*,1,CH	Initialize	\$04A	47900000
* RXVYES,'Y'	Yes	\$04A	47950000
* RXVNO,'N'	No	\$04A	48000000
RXVACTERA,*,1,CH	Erase	\$04A	48050000
* RXVYES,'Y'	Yes	\$04A	48100000
* RXVNO,'N'	No	\$04A	48150000
RXVACTNOT,*,1,CH	Notify	\$04A	48200000
* RXVYES,'Y'	Yes	\$04A	48250000
* RXVNO,'N'	No	\$04A	48300000
SKIP,2	Reserved	\$04A	48350000
RXVABEND,*,1,CH	Data set closed by abend	\$04A	48400000
* RXVYES,'Y'	Yes	\$04A	48450000
* RXVNO,'N'	No	\$04A	48500000
RXVHOMTYP,*,1,CH	Home location type	\$04A	48550000
* RXVAUT,'A'	Auto	\$04A	48600000
* RXVMAN,'M'	Manual	\$04A	48650000
* RXVBLK,' '	Blank	\$04A	48700000
RXVNEXTYP,*,1,CH	Next location type	\$04A	48750000
* RXVAUT,'A'	Auto	\$04A	48800000
* RXVMAN,'M'	Manual	\$04A	48850000
* RXVSTR,'S'	Store	\$04A	48900000
* RXVBLK,' '	Blank	\$04A	48950000
RXVOLTYPE,*,1,CH	Volume type	\$04A	49000000
* MVVOLTYPE_PHYSICAL,'0'	Volume type physical	\$04A	49050000
* MVVOLTYPE_LOGICAL,'1'	Volume type logical	\$04A	49100000
* MVVOLTYPE_STACKED,'2'	Volume type stacked	\$04A	49150000
RXVRSREL,*,8,CH	VRS release options	\$04A	49200000
RXVRELIXD,=,1,CH	Ignore EXPDT	\$04A	49250000
* RXVYES,'Y'	Yes	\$04A	49300000
* RXVNO,'N'	No	\$04A	49350000
RXVRELSI,*,1,CH	Scratch immediate	\$04A	49400000
* RXVYES,'Y'	Yes	\$04A	49450000
* RXVNO,'N'	No	\$04A	49500000
SKIP,6	Reserved	\$04A	49550000
RXVCONTNR,*,16,CH	In container name	\$04A	49600000
RXVRQPRTY,*,4,CH	Movement priority	\$04A	49650000
RXVCAPACITY,*,10,CH	Volume capacity in bytes	\$04A	49700000
RXVRBYSET,*,1,CH	Volume retained by set	\$04A	49750000
RXVSTACKVOL_ENABLED,*,1,CH	Stacked volume record enabled	\$04A	49800000

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*                               and synchronized                               §04A 49850000
RXVEXPTOKEN,*,8,CH             Unique value created at start of       §04A 49900000
*                               Export to a new stacked volume                 §04A 49950000
RXVSTACKED_VOLCOUNT,*,10,CH  Count of volumes stacked on a volume §04A 50000000
RXVPERCENT,*,3,CH             Volume percentage full                          §04A 50050000
RXVDSNNO,*,5,CH              NUMBER OF DATASETS ON VOLUME                §SCC 50094400
RXVLABNO1,*,5,CH             LABEL NO OF FIRST FILE ON VOL                §SCC 50138800
RXVDCRSID,*,8,CH             First file creation system ID                §05A 50183300
    SKIP,1                    Reserved                                       §05C 50216600
RXVOLCNT,*,4,CH             Multi volume count                               §04A 50250000
    SKIP,4                    Reserved                                       §04A 50300000
RXDSNAME,*,44,CH            Data set name                                       §04A 50350000
*****§04A 50400000
* Start of common fields:                                             *§04A 50450000
* The common fields are in the same place in each record type *§04A 50500000
* in the report extract file. This allows common processing of *§04A 50550000
* these field across multiple record types.                            *§04A 50600000
*****§04A 50650000
RXDCRDATE,*,10,CH           Create date of data set record                §04A 50700000
RXDCRTIME,*,6,CH           Create time (HHMMSS) of data set             §04A 50750000
RXDCRSID,*,8,CH           Create system id of data set record          §04A 50800000
RXDLCDATE,*,10,CH         Last change date of data set record          §04A 50850000
RXDLCTIME,*,6,CH         Last change time (HHMMSS) of data set reco §04A 50900000
RXDLCUID,*,8,CH          Last change user id of data set record      §04A 50950000
RXDLCSID,*,8,CH          Last change system id of data set record    §04A 51000000
RXDVOLSER,*,6,CH         Volume serial number                         §04A 51050000
    SKIP,4                 Reserved                                       §K2C 51100000
RXDUNITAD,*,4,CH         Creating drive address                       §04A 51150000
RXDRECFM,*,4,CH         Record format                               §04A 51200000
RXDVOLSEQ,*,4,CH        Volume sequence number                     §04A 51250000
RXDLRECL,*,6,CH         Logical record length                       §04A 51300000
RXDBLKSZ,*,6,CH         Physical block size                         §04A 51350000
RXDBLKCNT,*,8,CH        Block count                                  §04A 51400000
RXDOWNSN,*,8,CH         Data set owner                              §04A 51450000
RXDSECLEV,*,8,CH        Security level - SHORT                      §04A 51500000
RXDSECLNG,*,30,CH       Security level - LONG                      §04A 51550000
RXDCOMP,*,1,CH          Compaction used                             §04A 51600000
    RXDYES,'Y'             Yes                                       §04A 51650000
    RXDNO,'N'             No                                       §04A 51700000
RXDLRDDAT,*,10,CH       Date data set last read                    §04A 51750000
RXDLWTDAT,*,10,CH       Date data set last written                 §04A 51800000
RXDMCNAME,*,8,CH        SMS management class                      §04A 51850000
RXDVRSVAL,*,8,CH        VRS management value                     §04A 51900000
RXDSGNAME,*,8,CH        SMS storage group name                   §04A 51950000
RXDSCNAME,*,8,CH        SMS storage class name                   §04A 52000000
RXDDCNAME,*,8,CH        SMS data class name                      §04A 52050000
RXDCRTJBN,*,8,CH        Creating job name                         §04A 52100000
RXDVRSTYP,*,1,CH       Matching VRS type flag                   §04A 52150000
    RXDVD,'D'             DATASET                                  §04A 52200000
    RXDVS,'S'             SMSMC                                       §04A 52250000
    RXDVV,'V'             VRSMV                                       §04A 52300000
    RXDVM,'M'             Dataset and VRSMV                          §04A 52350000
    RXDVC,'C'             Dataset and SMSMC                          §04A 52400000
RXDVRSNAM,*,44,CH       Matching VRS name                         §04A 52450000
RXDVRSJBN,*,8,CH        Matching VRS job name mask                §04A 52500000
RXDRETDAT,*,10,CH       Retention date                            §04A 52550000
RXDSTEPNM,*,8,CH        Creating step name                        §04A 52600000
RXDDDDNAME,*,8,CH       Creating DD name                          §04A 52650000
*****§04A 52700000
* RXDMDMVID: Is a unique token assigned to every volume and *§04A 52750000
*                               every data set in a multi-volume set.          *§04A 52800000
*****§04A 52850000
RXDMDMVID,*,8,CH        Multi-data set multi-volume id           §04A 52900000
*****§04A 52950000
* Data set size: This is calculated by multiplying the blocksize*§04A 53000000
*                               by the number of blocks.                       *§04A 53050000
*****§04A 53100000

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RXDDSSIZE,*	10,CH	Approx. size of file kbytes	\$04A	53150000
RXDABEND,*	1,CH	Data set closed by abend	\$04A	53200000
* RXDYES,'Y'		Yes	\$04A	53250000
* RXDNO,'N'		No	\$04A	53300000
*****\$04A 53350000				
* RXDCAT:		Set to 'Y' when opened after allocation determines	*\$04A	53400000
*		VOLSER by reference to the catalog. Once set to 'Y' it	*\$04A	53450000
*		is never changed.	*\$04A	53500000
*****\$04A 53550000				
RXDCAT,*	1,CH	Data set used via catalog Y/N	\$04a	53600000
* RXDYES,'Y'		Yes	\$04A	53650000
* RXDNO,'N'		No	\$04A	53700000
RXDVRSR,*	1,CH	Retained by VRS	\$04A	53750000
* RXDYES,'Y'		Yes	\$04A	53800000
* RXDNO,'N'		No	\$04A	53850000
SKIP,3		Reserved	\$04A	53900000
SKIP,4		Reserved	\$04A	53950000
*****\$04A 54000000				
* Primary VRS subchain name:			*\$04A	54050000
*		This is the retaining VRS in the matching	*\$04A	54100000
*		primary VRS chain. It is set only if retained	*\$04A	54150000
*		by a NAME VRS subchain in the primary VRS.	*\$04A	54200000
*****\$04A 54250000				
RXDVRSSCH,*	8,CH	Primary VRS subchain name	\$04A	54300000
RXDVRXDS,*	10,CH	Primary VRS subchain start date	\$04A	54350000
*****\$04A 54400000				
* Retaining Secondary VRS name:			\$04A	54450000
*		Matching vrs name and job name are included	*\$04A	54500000
*		where a secondary VRS also matches.	*\$04A	54550000
*		The retaining VRS subchain NAME in this	*\$04A	54600000
*		matching VRS is set if it is used to retain	*\$04A	54650000
*		the data set.	*\$04A	54700000
*****\$04A 54750000				
RXD2VNME,*	8,CH	Secondary VRS name mask	\$04A	54800000
RXD2VJBN,*	8,CH	Secondary VRS jobname mask	\$04A	54850000
RXD2VSCH,*	8,CH	Secondary VRS subchain NAME	\$04A	54900000
RXD2VXDS,*	10,CH	Secondary VRS subchain startdate	\$04A	54950000
RXDTOTAL_BLKCNT,*	10,CH	Total block count across all ds volumes	\$04A	55000000
RXDPERCENT,*	3,CH	Percentage of volume used by data set	\$04A	55050000
RXDPCGM,*	8,CH	Creating program name	\$04A	55100000
RXDLPGM,*	8,CH	Last used program name	\$04A	55150000
RXDLJOB,*	8,CH	Last used job name	\$04A	55200000
RXDLSTEP,*	8,CH	Last used step name	\$04A	55250000
RXDLDNM,*	8,CH	Last used DD name	\$04A	55300000
RXDLDEVN,*	4,CH	Last used device name	\$04A	55350000
RXVMVDSNAM1,*	44,CH	First dataset of a volume set	\$K2C	55400000
RXDDSNSEQ,*	5,CH	Data set sequence number	\$04A	55438800
RXDLABNO,*	5,CH	Label number Label=(xx,11)	\$04A	55477600
RXVDESTBIN,*	6,CH	Destination Bin Number	\$SCA	55516600
RXVDESTBINMEDIA,*	8,CH	Destination Bin Media Name	\$SCA	55533200
RXVOL1,*	6,CH	VOL1 label volser	\$LSA	55541600
***** 55550000				
* End of report extended extract record			*	55600000
***** 55650000				
RXRCEND,*		End of RVEXT		55700000
***** 55750000				
* End of report extract record			*	55800000
***** 55850000				

EDGSMFSY: SMF Record Symbols

EDGSMFSY provides the DFSORT symbol mapping for the DFSMSrmm SMF records as follows:

```

*****
*
* RMM Inventory Management SMF Record                §02C *
* DFSORT Symbol mapping                            *
*
*****
* z/OS DFSMSrmm V1R3                                *
*
*PROPRIETARY V3 STATEMENT                          *
*LICENSED MATERIALS - PROPERTY OF IBM              *
*"RESTRICTED MATERIALS OF IBM"                    *
*5694-A01                                           *
*(C) COPYRIGHT 1993,2003 IBM CORP.                 *
*STATUS = HDZ11H0                                   *
*END PROPRIETARY V3 STATEMENT                      *
*
*****
* SEE "z/OS DFSMSrmm Reporting" FOR FIELD DETAILS ON RMM RECORDS §03C*
* SEE "DFSORT APG" FOR DETAILS OF USING SYMBOLS.    §03C*
*****
* CHANGE ACTIVITY:                                  *
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols       §LGA *
* $01=K161019,210,000118,CHK: Creating Program name symbols §01A *
* $02=0W44589,210,000522,BG: Correct DFSMSrmm reference comment §02A *
* $SC=0W49863,210,010531,AP : Minimal Bin Assignment §SCA *
* $LS=RMMV1R3,1R3,011113,CHK: Duplicate Volser     §LSA *
***** 00936000
* START OF RMM SMFAR                                * 00972000
***** 01008000
SMFAR,1,8463                                        01044000
  SMFADLEN,=,2,BI      RECORD LENGTH                01080000
  SKIP,2              RESERVED                      01116000
  SMFADFLG,*,1,BI     SYSTEM TYPE                   01152000
  SMFAXA,X'04'        MVS/XA                       01188000
  SMFAESA,X'0E'       MVS/ESA                      01224000
  SMFADRTY,*,1,BI    RECORD TYPE                   01260000
  SMFADTME,*,4,BI    TIME SINCE MIDNIGHT IN HUNDREDTHS OF A SECOND
*                    THAT RECORD WAS MOVED TO THE SMF BUFFER. 01296000
  SMFADDTE,*,4,PD    DATE RECORD WAS MOVED TO THE SMF BUFFER
*                    IN THE FORM 0CYYDDDF WHERE F IS THE SIGN AND 01404000
*                    C IS 0 FOR 19YY AND 1 FOR 20YY.          01440000
  SMFADSID,*,4,CH    SYSTEM IDENTIFICATION          01476000
  SMFADJBN,*,8,CH    JOB NAME                      01512000
  SMFADRST,*,4,CH    READER START TIME            01548000
  SMFADRSD,*,4,CH    READER START DATE            01584000
***** 01620000
* END OF SMF RECORD HEADER SECTION                  * 01656000
***** 01692000
  SMFADUID,*,8,CH    RACF USER ID                  01728000
  SMFADACT,*,1,CH    ACTIVITY TYPE                 01764000
  SMFADD,'A'         RECORD ADDED                  01800000
  SMFCHG,'C'        RECORD CHANGED                01836000
  SMFDEL,'D'        RECORD DELETED                01872000
***** 01944000
* START OF OVERLAY AREA                             * 01980000
***** 02016000
SMFADREC,*          START OF INFORMATION           02052000
*
*
***** 02124000
* ACTION RECORD                                     * 02160000
***** 02196000
*
*
***** 02232000

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POSITION,SMFADREC          START AFTER EDGSMFAR          02268000
*****                    *****                    02304000
* KEY FIELD                * 02340000
*****                    *****                    02376000
  MAKEY,=,56              KEY FIELD                    02412000
    MATYPE,=,1,CH        RECORD TYPE                  02448000
      MATYPEID,'C'       ACTION RECORD ID SYMBOL      02484000
    MATYPE1,*,1,CH      SUB-TYPE                      02520000
      MATYPE1_ACTION,'A' ACTION                      02556000
        MATYPE1_MOVE,'M' MOVE                        02592000
    MAACTION,*,8,CH    ACTION TYPE                    02628000
      MAMVE,'MOVE'     MOVE                          02664000
      MASCR,'SCRATCH'  SCRATCH                       02700000
      MARET,'RETURN'   RETURN                        02736000
      MAREP,'REPLACE'  REPLACE                       02772000
      MAINI,'INIT'     INIT                          02808000
      MAERS,'ERASE'    ERASE                          02844000
      MANTF,'NOTIFY'   NOTIFY                        02880000
    SKIP,8              RESERVED                      02916000
    MALOC,*,8,CH       SOURCE LOCATION FOR MOVE      02952000
    MADEST,*,8,CH     TARGET LOCATION FOR MOVE      02988000
    SKIP,22           RESERVED                      03024000
*****                    *****                    03060000
* CONTROL INFORMATION      * 03096000
*****                    *****                    03132000
  MARECLN,*,2,FI       RECORD LENGTH                 03168000
  SKIP,2               RESERVED                      03204000
  MACRDATE,*,4,PD     ACTION CREATE DATE - YYYYDDD  03240000
  MACRTIME,*,4,PD     ACTION CREATE TIME - HHMMSS    03276000
  MACRSID,*,8,CH      CREATE SYSTEM ID              03312000
  MARCCDS,*,8,CH      RECORD CREATE CDS ID          03348000
  MALCDATE,*,4,PD     LAST CHANGE DATE - YYYYDDD    03384000
  MALCTIME,*,4,PD     LAST CHANGE TIME - HHMMSS      03420000
  MALCUID,*,8,CH      LAST CHANGE USER ID           03456000
  MALCSID,*,8,CH      LAST CHANGE SYSTEM ID         03492000
  MAUCDATE,*,4,PD     LAST "USER" CHANGE DATE      03528000
  MAUCTIME,*,4,PD     LAST "USER" CHANGE TIME      03564000
  MACFLG,*,1,BI       CONTROL FLAGS 1                03600000
    MADEFLG,X'80'     RECORD DELETED                 03636000
    MASEFLG,X'10'     SELECT - PROC BY SATELLITE UPDT 03672000
  MARECLEV,*,1,BI    RECORD LEVEL NUMBER            03708000
  SKIP,6             RESERVED                      03744000
*****                    *****                    03780000
* ACTION RECORD SPECIFIC INFORMATION * 03816000
*****                    *****                    03852000
  MACOUNT,*,4,FI      COUNT OF VOLS REQ THIS ACTION 03888000
  MASFLAG,*,1,BI      STATUS OF MOVES AND ACTIONS   03924000
    MASCOMP,X'80'     COMPLETED                     03960000
    MASPEND,X'40'     PENDING                         03996000
    MASCONF,X'20'     CONFIRMED                       04032000
    MASUNK,X'10'     UNKNOWN                          04068000
  SKIP,7             RESERVED                      04104000
*****                    *****                    04140000
* END OF ACTION RECORD SPECIFICATION FILE RECORD * 04176000
*****                    *****                    04212000
MARCEND,*            END OF MAREC                    04248000
*****                    *****                    04284000
* END OF RMM MAREC      * 04320000
*****                    *****                    04356000
*                        * 04392000
POSITION,SMFADREC          START AFTER EDGSMFAR          04428000
*****                    *****                    04464000
* KEY FIELD                * 04500000
*****                    *****                    04536000
  MDKEY,=,56          KEY FIELD                    04572000
    MDTYPE,=,1,CH    RECORD TYPE                  04608000
      MDTYPEID,'D'   DSN INFO ID SYMBOL          04644000

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MDDSNNAME,*,44,CH	DATASET NAME	04680000
MDVOLSER,*,6,CH	VOLUME SERIAL NUMBER	04716000
SKIP,1	RESERVED	04752000
MDDSNSEQ,*,2,BI	DATASET SEQUENCE NUMBER	\$LLC 04788000
SKIP,2	RESERVED	04824000
*****	*****	04860000
* CONTROL INFORMATION		* 04896000
*****	*****	04932000
MDRECLN,*,2,FI	RECORD LENGTH	04968000
SKIP,2	RESERVED	05004000
MDCRDATE,*,4,PD	DSN CREATE DATE - YYYYDDD	05040000
MDCRTIME,*,4,PD	DSN CREATE TIME - HHMSST	05076000
MDCRSID,*,8,CH	CREATE SYSTEM ID	05112000
MDRCCDS,*,8,CH	RECORD CREATE CDS ID	05148000
MDLCDATE,*,4,PD	LAST CHANGE DATE - YYYYDDD	05184000
MDLCTIME,*,4,PD	LAST CHANGE TIME - HHMSST	05220000
MDLCUID,*,8,CH	LAST CHANGE USER ID	05256000
MDLCSID,*,8,CH	LAST CHANGE SYSTEM ID	05292000
MDUCDATE,*,4,PD	LAST "USER" CHANGE DATE	05328000
MDUCTIME,*,4,PD	LAST "USER" CHANGE TIME	05364000
MDCFLG,*,1,BI	CONTROL FLAGS 1	05400000
MDDELFLG,X'80'	RECORD DELETED	05436000
MDPDLFLG,X'40'	RECORD PREVIOUSLY DELETED	05472000
MDSSELFLG,X'10'	SELECT - PROC BY SATELLITE UPDT	05508000
MDDUMMY,X'08'	DUMMY RECORD - ALLOW TSO ADD	05544000
MDRECLEV,*,1,BI	RECORD LEVEL NUMBER	05580000
SKIP,6	RESERVED	05616000
*****	*****	05652000
* DSNAME INFORMATION		* 05688000
*****	*****	05724000
MDTOTAL_BLK,*,4,FI	TOTAL BLOCK COUNT	05760000
MDSTART_POSN,*,1,BI	FILE START MEDIA POSITION	\$01A 05784000
MDEND_POSN,*,1,BI	FILE END MEDIA POSITION	\$01A 05808000
MDVOLSEQ,*,2,FI	VOLUME SEQUENCE NUMBER	05832000
MDUNITAD,*,4,CH	UNIT ADDRESS	05868000
MDRECFM,*,4,CH	RECORD FORMAT	05904000
MDLRECL,*,4,FI	LOGICAL RECORD LENGTH	05940000
MDBLKSZ,*,4,FI	PHYSICAL BLOCK SIZE	05976000
MDBLKCNT,*,4,FI	BLOCK COUNT	06012000
MDDOWNDSN,*,8,CH	DATASET OWNER	06048000
MDSECLEV,*,1,BI	SECURITY LEVEL	06084000
MDTRTCH,*,1,BI	FROM JFCTRTCH - IDRC SUPPORT	06120000
MDTCOMP,X'08'	DSN USED 3480 IDRC	06156000
MDTNCOMP,X'04'	NO COMPACTION	06192000
MDFILSEQ,*,2,BI	LOGICAL FILE SEQUENCE NO	06228000
MDTOKEN,*,8,CH	RESERVED FOR RMM INTERNAL USE	06264000
MDDSSIZE,*,4,FI	DATASET SIZE IN KBYTES	06300000
MDLRDATE,*,4,PD	DATE LAST READ - YYYYDDD	06336000
MDLWDATE,*,4,PD	DATE LAST WRITTEN - YYYYDDD	06372000
MDFLAG,*,1,BI	FLAG BYTE	06408000
MDFCAT,B'1.....'	DATA SET IS CATALOGED	06444000
MDFVRSR,B'1.....'	DATA SET IS RETAINED BY VRS	06480000
MDFNOTCAT,B'..1.....'	INDICATES DS WAS FOUND NOT TO BE	06516000
*	CATALOGED DURING VRS	06552000
MDFABEND,B'....1...'	ABEND IN PROGRESS WHEN DATA SET CLOSED	06588000
MDFOCEAB,B'.....1..'	ABEND PROBABLY IN O/C/EV	06624000
MDFORCE,B'.....1.'	FORCE SUPPLIED	06660000
SKIP,2	RESERVED	06696000
MDVRSSTYP,*,1,CH	MATCHING VRS TYPE	06732000
MDVTD,'D'	DATASET	06768000
MDVTS,'S'	SMSMC	06804000
MDVTV,'V'	VRSMV	06840000
MDVTM,'M'	DSN/MV	06876000
MDACSMC,*,8,CH	SMS MANAGEMENT CLASS NAME	06912000
MDFACSMC,*,8,CH	OLD SMS MANAGEMENT CLASS NAME	06948000
MDVRSVAL,*,8,CH	VRS MANAGEMENT VALUE	06984000
MDACSSG,*,8,CH	SMS STORAGE GROUP NAME	07020000

MDACSSC,* ,8,CH	SMS STORAGE CLASS NAME	07056000
MDACSDC,* ,8,CH	SMS DATA CLASS NAME	07092000
MDCRTJBN,* ,8,CH	CREATING JOB NAME	07128000
MDVRSJBN,* ,8,CH	MATCHING VRS JOB NAME MASK	07164000
MDRETDAT,* ,4,CH	RETENTION DATE	07200000
MDSTEPNM,* ,8,CH	CREATING STEP NAME	07236000
MDDDDNAME,* ,8,CH	CREATING DDNAME	07272000
MDPVSCH,* ,8,CH	PRIMARY VRS SUBSEQUENT SUBCHAIN NAME	07308000
MDPVSDTE,* ,4,PD	PRIMARY VRS SUBSEQUENT SUBCHAIN START DATE	07344000
MDEXPDT,* ,4,PD	EXPIRATION DATE	07380000
MDEXPDTO,* ,4,PD	ORIGINAL EXPIRATION DATE	07416000
SKIP,8	RESERVED	07452000
MDBLKIDS,* ,4,FI	FILE START BLOCKID	\$01A 07455600
MDBLKIDE,* ,4,FI	FILE END BLOCKID	\$01A 07459200
MDCPGM,* ,8,CH	CREATING PROGRAM NAME	\$01A 07462800
MDLPGM,* ,8,CH	LAST USE PROGRAM NAME	\$01A 07466400
MDLJOB,* ,8,CH	LAST USE JOB NAME	\$01A 07470000
MDLSTEP,* ,8,CH	LAST USE STEP NAME	\$01A 07473600
MDLDDNM,* ,8,CH	LAST USE DD NAME	\$01A 07477200
MDLDEVN,* ,4,CH	LAST USE DEVICE NUMBER	\$01A 07480800
SKIP,4	RESERVED	\$01A 074844
MPVOLENT_028,* ,32	VOLUME ENTRY - 028	366120
MPVOLENT_163,* ,32	VOLUME ENTRY - 163	65772000
MPVOLSER_163,=,6,CH	VOLUME SERIAL - 163	65808000
MPRACK_163,* ,6,CH	RACK NUMBER - 163	65844000
MPFEAT_163,* ,4,CH	FEATURE CODE - 163	65880000
MPUNIT_163,* ,8,CH	UNIT TYPE - 163	65916000
SKIP,8	RESERVED	65952000
MPVOLENT_164,* ,32	VOLUME ENTRY - 164	65988000
MPVOLSER_164,=,6,CH	VOLUME SERIAL - 164	66024000
MPRACK_164,* ,6,CH	RACK NUMBER - 164	66060000
MPFEAT_164,* ,4,CH	FEATURE CODE - 164	66096000
MPUNIT_164,* ,8,CH	UNIT TYPE - 164	66132000
SKIP,8	RESERVED	66168000
MPVOLENT_165,* ,32	VOLUME ENTRY - 165	66204000
MPVOLSER_165,=,6,CH	VOLUME SERIAL - 165	66240000
MPRACK_165,* ,6,CH	RACK NUMBER - 165	66276000
MPFEAT_165,* ,4,CH	FEATURE CODE - 165	66312000
MPUNIT_165,* ,8,CH	UNIT TYPE - 165	66348000
SKIP,8	RESERVED	66384000
MPVOLENT_166,* ,32	VOLUME ENTRY - 166	66420000
MPVOLSER_166,=,6,CH	VOLUME SERIAL - 166	66456000
MPRACK_166,* ,6,CH	RACK NUMBER - 166	66492000
MPFEAT_166,* ,4,CH	FEATURE CODE - 166	66528000
MPUNIT_166,* ,8,CH	UNIT TYPE - 166	66564000
SKIP,8	RESERVED	66600000
MPVOLENT_167,* ,32	VOLUME ENTRY - 167	66636000
MPVOLSER_167,=,6,CH	VOLUME SERIAL - 167	66672000
MPRACK_167,* ,6,CH	RACK NUMBER - 167	66708000
MPFEAT_167,* ,4,CH	FEATURE CODE - 167	66744000
MPUNIT_167,* ,8,CH	UNIT TYPE - 167	66780000
SKIP,8	RESERVED	66816000
MPVOLENT_168,* ,32	VOLUME ENTRY - 168	66852000
MPVOLSER_168,=,6,CH	VOLUME SERIAL - 168	66888000
MPRACK_168,* ,6,CH	RACK NUMBER - 168	66924000
MPFEAT_168,* ,4,CH	FEATURE CODE - 168	66960000
MPUNIT_168,* ,8,CH	UNIT TYPE - 168	66996000
SKIP,8	RESERVED	67032000
MPVOLENT_169,* ,32	VOLUME ENTRY - 169	67068000
MPVOLSER_169,=,6,CH	VOLUME SERIAL - 169	67104000
MPRACK_169,* ,6,CH	RACK NUMBER - 169	67140000
MPFEAT_169,* ,4,CH	FEATURE CODE - 169	67176000
MPUNIT_169,* ,8,CH	UNIT TYPE - 169	67212000
SKIP,8	RESERVED	67248000
MPVOLENT_170,* ,32	VOLUME ENTRY - 170	67284000
MPVOLSER_170,=,6,CH	VOLUME SERIAL - 170	67320000
MPRACK_170,* ,6,CH	RACK NUMBER - 170	67356000

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MPFEAT_170,* ,4,CH	FEATURE CODE - 170	67392000
MPUNIT_170,* ,8,CH	UNIT TYPE - 170	67428000
SKIP,8	RESERVED	67464000
MPVOLTENT_171,* ,32	VOLUME ENTRY - 171	67500000
MPVOLSER_171,=,6,CH	VOLUME SERIAL - 171	67536000
MPRACK_171,* ,6,CH	RACK NUMBER - 171	67572000
MPFEAT_171,* ,4,CH	FEATURE CODE - 171	67608000
MPUNIT_171,* ,8,CH	UNIT TYPE - 171	67644000
SKIP,8	RESERVED	67680000
MPVOLTENT_172,* ,32	VOLUME ENTRY - 172	67716000
MPVOLSER_172,=,6,CH	VOLUME SERIAL - 172	67752000
MPRACK_172,* ,6,CH	RACK NUMBER - 172	67788000
MPFEAT_172,* ,4,CH	FEATURE CODE - 172	67824000
MPUNIT_172,* ,8,CH	UNIT TYPE - 172	67860000
SKIP,8	RESERVED	67896000
MPVOLTENT_173,* ,32	VOLUME ENTRY - 173	67932000
MPVOLSER_173,=,6,CH	VOLUME SERIAL - 173	67968000
MPRACK_173,* ,6,CH	RACK NUMBER - 173	68004000
MPFEAT_173,* ,4,CH	FEATURE CODE - 173	68040000
MPUNIT_173,* ,8,CH	UNIT TYPE - 173	68076000
SKIP,8	RESERVED	68112000
MPVOLTENT_174,* ,32	VOLUME ENTRY - 174	68148000
MPVOLSER_174,=,6,CH	VOLUME SERIAL - 174	68184000
MPRACK_174,* ,6,CH	RACK NUMBER - 174	68220000
MPFEAT_174,* ,4,CH	FEATURE CODE - 174	68256000
MPUNIT_174,* ,8,CH	UNIT TYPE - 174	68292000
SKIP,8	RESERVED	68328000
MPVOLTENT_175,* ,32	VOLUME ENTRY - 175	68364000
MPVOLSER_175,=,6,CH	VOLUME SERIAL - 175	68400000
MPRACK_175,* ,6,CH	RACK NUMBER - 175	68436000
MPFEAT_175,* ,4,CH	FEATURE CODE - 175	68472000
MPUNIT_175,* ,8,CH	UNIT TYPE - 175	68508000
SKIP,8	RESERVED	68544000
MPVOLTENT_176,* ,32	VOLUME ENTRY - 176	68580000
MPVOLSER_176,=,6,CH	VOLUME SERIAL - 176	68616000
MPRACK_176,* ,6,CH	RACK NUMBER - 176	68652000
MPFEAT_176,* ,4,CH	FEATURE CODE - 176	68688000
MPUNIT_176,* ,8,CH	UNIT TYPE - 176	68724000
SKIP,8	RESERVED	68760000
MPVOLTENT_177,* ,32	VOLUME ENTRY - 177	68796000
MPVOLSER_177,=,6,CH	VOLUME SERIAL - 177	68832000
MPRACK_177,* ,6,CH	RACK NUMBER - 177	68868000
MPFEAT_177,* ,4,CH	FEATURE CODE - 177	68904000
MPUNIT_177,* ,8,CH	UNIT TYPE - 177	68940000
SKIP,8	RESERVED	68976000
MPVOLTENT_178,* ,32	VOLUME ENTRY - 178	69012000
MPVOLSER_178,=,6,CH	VOLUME SERIAL - 178	69048000
MPRACK_178,* ,6,CH	RACK NUMBER - 178	69084000
MPFEAT_178,* ,4,CH	FEATURE CODE - 178	69120000
MPUNIT_178,* ,8,CH	UNIT TYPE - 178	69156000
SKIP,8	RESERVED	69192000
MPVOLTENT_179,* ,32	VOLUME ENTRY - 179	69228000
MPVOLSER_179,=,6,CH	VOLUME SERIAL - 179	69264000
MPRACK_179,* ,6,CH	RACK NUMBER - 179	69300000
MPFEAT_179,* ,4,CH	FEATURE CODE - 179	69336000
MPUNIT_179,* ,8,CH	UNIT TYPE - 179	69372000
SKIP,8	RESERVED	69408000
MPVOLTENT_180,* ,32	VOLUME ENTRY - 180	69444000
MPVOLSER_180,=,6,CH	VOLUME SERIAL - 180	69480000
MPRACK_180,* ,6,CH	RACK NUMBER - 180	69516000
MPFEAT_180,* ,4,CH	FEATURE CODE - 180	69552000
MPUNIT_180,* ,8,CH	UNIT TYPE - 180	69588000
SKIP,8	RESERVED	69624000
MPVOLTENT_181,* ,32	VOLUME ENTRY - 181	69660000
MPVOLSER_181,=,6,CH	VOLUME SERIAL - 181	69696000
MPRACK_181,* ,6,CH	RACK NUMBER - 181	69732000
MPFEAT_181,* ,4,CH	FEATURE CODE - 181	69768000

MPUNIT_181,*,8,CH	UNIT TYPE - 181	69804000
SKIP,8	RESERVED	69840000
MPVOLENT_182,*,32	VOLUME ENTRY - 182	69876000
MPVOLSER_182,=,6,CH	VOLUME SERIAL - 182	69912000
MPRACK_182,*,6,CH	RACK NUMBER - 182	69948000
MPFEAT_182,*,4,CH	FEATURE CODE - 182	69984000
MPUNIT_182,*,8,CH	UNIT TYPE - 182	70020000
SKIP,8	RESERVED	70056000
MPVOLENT_183,*,32	VOLUME ENTRY - 183	70092000
MPVOLSER_183,=,6,CH	VOLUME SERIAL - 183	70128000
MPRACK_183,*,6,CH	RACK NUMBER - 183	70164000
MPFEAT_183,*,4,CH	FEATURE CODE - 183	70200000
MPUNIT_183,*,8,CH	UNIT TYPE - 183	70236000
SKIP,8	RESERVED	70272000
MPVOLENT_184,*,32	VOLUME ENTRY - 184	70308000
MPVOLSER_184,=,6,CH	VOLUME SERIAL - 184	70344000
MPRACK_184,*,6,CH	RACK NUMBER - 184	70380000
MPFEAT_184,*,4,CH	FEATURE CODE - 184	70416000
MPUNIT_184,*,8,CH	UNIT TYPE - 184	70452000
SKIP,8	RESERVED	70488000
MPVOLENT_185,*,32	VOLUME ENTRY - 185	70524000
MPVOLSER_185,=,6,CH	VOLUME SERIAL - 185	70560000
MPRACK_185,*,6,CH	RACK NUMBER - 185	70596000
MPFEAT_185,*,4,CH	FEATURE CODE - 185	70632000
MPUNIT_185,*,8,CH	UNIT TYPE - 185	70668000
SKIP,8	RESERVED	70704000
MPVOLENT_186,*,32	VOLUME ENTRY - 186	70740000
MPVOLSER_186,=,6,CH	VOLUME SERIAL - 186	70776000
MPRACK_186,*,6,CH	RACK NUMBER - 186	70812000
MPFEAT_186,*,4,CH	FEATURE CODE - 186	70848000
MPUNIT_186,*,8,CH	UNIT TYPE - 186	70884000
SKIP,8	RESERVED	70920000
MPVOLENT_187,*,32	VOLUME ENTRY - 187	70956000
MPVOLSER_187,=,6,CH	VOLUME SERIAL - 187	70992000
MPRACK_187,*,6,CH	RACK NUMBER - 187	71028000
MPFEAT_187,*,4,CH	FEATURE CODE - 187	71064000
MPUNIT_187,*,8,CH	UNIT TYPE - 187	71100000
SKIP,8	RESERVED	71136000
MPVOLENT_188,*,32	VOLUME ENTRY - 188	71172000
MPVOLSER_188,=,6,CH	VOLUME SERIAL - 188	71208000
MPRACK_188,*,6,CH	RACK NUMBER - 188	71244000
MPFEAT_188,*,4,CH	FEATURE CODE - 188	71280000
MPUNIT_188,*,8,CH	UNIT TYPE - 188	71316000
SKIP,8	RESERVED	71352000
MPVOLENT_189,*,32	VOLUME ENTRY - 189	71388000
MPVOLSER_189,=,6,CH	VOLUME SERIAL - 189	71424000
MPRACK_189,*,6,CH	RACK NUMBER - 189	71460000
MPFEAT_189,*,4,CH	FEATURE CODE - 189	71496000
MPUNIT_189,*,8,CH	UNIT TYPE - 189	71532000
SKIP,8	RESERVED	71568000
MPVOLENT_190,*,32	VOLUME ENTRY - 190	71604000
MPVOLSER_190,=,6,CH	VOLUME SERIAL - 190	71640000
MPRACK_190,*,6,CH	RACK NUMBER - 190	71676000
MPFEAT_190,*,4,CH	FEATURE CODE - 190	71712000
MPUNIT_190,*,8,CH	UNIT TYPE - 190	71748000
SKIP,8	RESERVED	71784000
MPVOLENT_191,*,32	VOLUME ENTRY - 191	71820000
MPVOLSER_191,=,6,CH	VOLUME SERIAL - 191	71856000
MPRACK_191,*,6,CH	RACK NUMBER - 191	71892000
MPFEAT_191,*,4,CH	FEATURE CODE - 191	71928000
MPUNIT_191,*,8,CH	UNIT TYPE - 191	71964000
SKIP,8	RESERVED	72000000
MPVOLENT_192,*,32	VOLUME ENTRY - 192	72036000
MPVOLSER_192,=,6,CH	VOLUME SERIAL - 192	72072000
MPRACK_192,*,6,CH	RACK NUMBER - 192	72108000
MPFEAT_192,*,4,CH	FEATURE CODE - 192	72144000
MPUNIT_192,*,8,CH	UNIT TYPE - 192	72180000

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SKIP,8	RESERVED	72216000
MPVOLENT_193,*,32	VOLUME ENTRY - 193	72252000
MPVOLSER_193,=,6,CH	VOLUME SERIAL - 193	72288000
MPRACK_193,*,6,CH	RACK NUMBER - 193	72324000
MPFEAT_193,*,4,CH	FEATURE CODE - 193	72360000
MPUNIT_193,*,8,CH	UNIT TYPE - 193	72396000
SKIP,8	RESERVED	72432000
MPVOLENT_194,*,32	VOLUME ENTRY - 194	72468000
MPVOLSER_194,=,6,CH	VOLUME SERIAL - 194	72504000
MPRACK_194,*,6,CH	RACK NUMBER - 194	72540000
MPFEAT_194,*,4,CH	FEATURE CODE - 194	72576000
MPUNIT_194,*,8,CH	UNIT TYPE - 194	72612000
SKIP,8	RESERVED	72648000
MPVOLENT_195,*,32	VOLUME ENTRY - 195	72684000
MPVOLSER_195,=,6,CH	VOLUME SERIAL - 195	72720000
MPRACK_195,*,6,CH	RACK NUMBER - 195	72756000
MPFEAT_195,*,4,CH	FEATURE CODE - 195	72792000
MPUNIT_195,*,8,CH	UNIT TYPE - 195	72828000
SKIP,8	RESERVED	72864000
MPVOLENT_196,*,32	VOLUME ENTRY - 196	72900000
MPVOLSER_196,=,6,CH	VOLUME SERIAL - 196	72936000
MPRACK_196,*,6,CH	RACK NUMBER - 196	72972000
MPFEAT_196,*,4,CH	FEATURE CODE - 196	73008000
MPUNIT_196,*,8,CH	UNIT TYPE - 196	73044000
SKIP,8	RESERVED	73080000
MPVOLENT_197,*,32	VOLUME ENTRY - 197	73116000
MPVOLSER_197,=,6,CH	VOLUME SERIAL - 197	73152000
MPRACK_197,*,6,CH	RACK NUMBER - 197	73188000
MPFEAT_197,*,4,CH	FEATURE CODE - 197	73224000
MPUNIT_197,*,8,CH	UNIT TYPE - 197	73260000
SKIP,8	RESERVED	73296000
MPVOLENT_198,*,32	VOLUME ENTRY - 198	73332000
MPVOLSER_198,=,6,CH	VOLUME SERIAL - 198	73368000
MPRACK_198,*,6,CH	RACK NUMBER - 198	73404000
MPFEAT_198,*,4,CH	FEATURE CODE - 198	73440000
MPUNIT_198,*,8,CH	UNIT TYPE - 198	73476000
SKIP,8	RESERVED	73512000
MPVOLENT_199,*,32	VOLUME ENTRY - 199	73548000
MPVOLSER_199,=,6,CH	VOLUME SERIAL - 199	73584000
MPRACK_199,*,6,CH	RACK NUMBER - 199	73620000
MPFEAT_199,*,4,CH	FEATURE CODE - 199	73656000
MPUNIT_199,*,8,CH	UNIT TYPE - 199	73692000
SKIP,8	RESERVED	73728000
MPVOLENT_200,*,32	VOLUME ENTRY - 200	73764000
MPVOLSER_200,=,6,CH	VOLUME SERIAL - 200	73800000
MPRACK_200,*,6,CH	RACK NUMBER - 200	73836000
MPFEAT_200,*,4,CH	FEATURE CODE - 200	73872000
MPUNIT_200,*,8,CH	UNIT TYPE - 200	73908000
SKIP,8	RESERVED	73944000
MPVOLENT_201,*,32	VOLUME ENTRY - 201	73980000
MPVOLSER_201,=,6,CH	VOLUME SERIAL - 201	74016000
MPRACK_201,*,6,CH	RACK NUMBER - 201	74052000
MPFEAT_201,*,4,CH	FEATURE CODE - 201	74088000
MPUNIT_201,*,8,CH	UNIT TYPE - 201	74124000
SKIP,8	RESERVED	74160000
MPVOLENT_202,*,32	VOLUME ENTRY - 202	74196000
MPVOLSER_202,=,6,CH	VOLUME SERIAL - 202	74232000
MPRACK_202,*,6,CH	RACK NUMBER - 202	74268000
MPFEAT_202,*,4,CH	FEATURE CODE - 202	74304000
MPUNIT_202,*,8,CH	UNIT TYPE - 202	74340000
SKIP,8	RESERVED	74376000
MPVOLENT_203,*,32	VOLUME ENTRY - 203	74412000
MPVOLSER_203,=,6,CH	VOLUME SERIAL - 203	74448000
MPRACK_203,*,6,CH	RACK NUMBER - 203	74484000
MPFEAT_203,*,4,CH	FEATURE CODE - 203	74520000
MPUNIT_203,*,8,CH	UNIT TYPE - 203	74556000
SKIP,8	RESERVED	74592000

MPVOLENT_204,*,32	VOLUME ENTRY - 204	74628000
MPVOLSÉR_204,=,6,CH	VOLUME SERIAL - 204	74664000
MPRACK_204,*,6,CH	RACK NUMBER - 204	74700000
MPFEAT_204,*,4,CH	FEATURE CODE - 204	74736000
MPUNIT_204,*,8,CH	UNIT TYPE - 204	74772000
SKIP,8	RESERVED	74808000
MPVOLENT_205,*,32	VOLUME ENTRY - 205	74844000
MPVOLSÉR_205,=,6,CH	VOLUME SERIAL - 205	74880000
MPRACK_205,*,6,CH	RACK NUMBER - 205	74916000
MPFEAT_205,*,4,CH	FEATURE CODE - 205	74952000
MPUNIT_205,*,8,CH	UNIT TYPE - 205	74988000
SKIP,8	RESERVED	75024000
MPVOLENT_206,*,32	VOLUME ENTRY - 206	75060000
MPVOLSÉR_206,=,6,CH	VOLUME SERIAL - 206	75096000
MPRACK_206,*,6,CH	RACK NUMBER - 206	75132000
MPFEAT_206,*,4,CH	FEATURE CODE - 206	75168000
MPUNIT_206,*,8,CH	UNIT TYPE - 206	75204000
SKIP,8	RESERVED	75240000
MPVOLENT_207,*,32	VOLUME ENTRY - 207	75276000
MPVOLSÉR_207,=,6,CH	VOLUME SERIAL - 207	75312000
MPRACK_207,*,6,CH	RACK NUMBER - 207	75348000
MPFEAT_207,*,4,CH	FEATURE CODE - 207	75384000
MPUNIT_207,*,8,CH	UNIT TYPE - 207	75420000
SKIP,8	RESERVED	75456000
MPVOLENT_208,*,32	VOLUME ENTRY - 208	75492000
MPVOLSÉR_208,=,6,CH	VOLUME SERIAL - 208	75528000
MPRACK_208,*,6,CH	RACK NUMBER - 208	75564000
MPFEAT_208,*,4,CH	FEATURE CODE - 208	75600000
MPUNIT_208,*,8,CH	UNIT TYPE - 208	75636000
SKIP,8	RESERVED	75672000
MPVOLENT_209,*,32	VOLUME ENTRY - 209	75708000
MPVOLSÉR_209,=,6,CH	VOLUME SERIAL - 209	75744000
MPRACK_209,*,6,CH	RACK NUMBER - 209	75780000
MPFEAT_209,*,4,CH	FEATURE CODE - 209	75816000
MPUNIT_209,*,8,CH	UNIT TYPE - 209	75852000
SKIP,8	RESERVED	75888000
MPVOLENT_210,*,32	VOLUME ENTRY - 210	75924000
MPVOLSÉR_210,=,6,CH	VOLUME SERIAL - 210	75960000
MPRACK_210,*,6,CH	RACK NUMBER - 210	75996000
MPFEAT_210,*,4,CH	FEATURE CODE - 210	76032000
MPUNIT_210,*,8,CH	UNIT TYPE - 210	76068000
SKIP,8	RESERVED	76104000
MPVOLENT_211,*,32	VOLUME ENTRY - 211	76140000
MPVOLSÉR_211,=,6,CH	VOLUME SERIAL - 211	76176000
MPRACK_211,*,6,CH	RACK NUMBER - 211	76212000
MPFEAT_211,*,4,CH	FEATURE CODE - 211	76248000
MPUNIT_211,*,8,CH	UNIT TYPE - 211	76284000
SKIP,8	RESERVED	76320000
MPVOLENT_212,*,32	VOLUME ENTRY - 212	76356000
MPVOLSÉR_212,=,6,CH	VOLUME SERIAL - 212	76392000
MPRACK_212,*,6,CH	RACK NUMBER - 212	76428000
MPFEAT_212,*,4,CH	FEATURE CODE - 212	76464000
MPUNIT_212,*,8,CH	UNIT TYPE - 212	76500000
SKIP,8	RESERVED	76536000
MPVOLENT_213,*,32	VOLUME ENTRY - 213	76572000
MPVOLSÉR_213,=,6,CH	VOLUME SERIAL - 213	76608000
MPRACK_213,*,6,CH	RACK NUMBER - 213	76644000
MPFEAT_213,*,4,CH	FEATURE CODE - 213	76680000
MPUNIT_213,*,8,CH	UNIT TYPE - 213	76716000
SKIP,8	RESERVED	76752000
MPVOLENT_214,*,32	VOLUME ENTRY - 214	76788000
MPVOLSÉR_214,=,6,CH	VOLUME SERIAL - 214	76824000
MPRACK_214,*,6,CH	RACK NUMBER - 214	76860000
MPFEAT_214,*,4,CH	FEATURE CODE - 214	76896000
MPUNIT_214,*,8,CH	UNIT TYPE - 214	76932000
SKIP,8	RESERVED	76968000
MPVOLENT_215,*,32	VOLUME ENTRY - 215	77004000

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MPVOLSER 215,=,6,CH	VOLUME SERIAL - 215	77040000
MPRACK_215,*,6,CH	RACK NUMBER - 215	77076000
MPFEAT_215,*,4,CH	FEATURE CODE - 215	77112000
MPUNIT_215,*,8,CH	UNIT TYPE - 215	77148000
SKIP,8	RESERVED	77184000
MPVOLENT 216,*,32	VOLUME ENTRY - 216	77220000
MPVOLSER 216,=,6,CH	VOLUME SERIAL - 216	77256000
MPRACK_216,*,6,CH	RACK NUMBER - 216	77292000
MPFEAT_216,*,4,CH	FEATURE CODE - 216	77328000
MPUNIT_216,*,8,CH	UNIT TYPE - 216	77364000
SKIP,8	RESERVED	77400000
MPVOLENT 217,*,32	VOLUME ENTRY - 217	77436000
MPVOLSER 217,=,6,CH	VOLUME SERIAL - 217	77472000
MPRACK_217,*,6,CH	RACK NUMBER - 217	77508000
MPFEAT_217,*,4,CH	FEATURE CODE - 217	77544000
MPUNIT_217,*,8,CH	UNIT TYPE - 217	77580000
SKIP,8	RESERVED	77616000
MPVOLENT 218,*,32	VOLUME ENTRY - 218	77652000
MPVOLSER 218,=,6,CH	VOLUME SERIAL - 218	77688000
MPRACK_218,*,6,CH	RACK NUMBER - 218	77724000
MPFEAT_218,*,4,CH	FEATURE CODE - 218	77760000
MPUNIT_218,*,8,CH	UNIT TYPE - 218	77796000
SKIP,8	RESERVED	77832000
MPVOLENT 219,*,32	VOLUME ENTRY - 219	77868000
MPVOLSER 219,=,6,CH	VOLUME SERIAL - 219	77904000
MPRACK_219,*,6,CH	RACK NUMBER - 219	77940000
MPFEAT_219,*,4,CH	FEATURE CODE - 219	77976000
MPUNIT_219,*,8,CH	UNIT TYPE - 219	78012000
SKIP,8	RESERVED	78048000
MPVOLENT 220,*,32	VOLUME ENTRY - 220	78084000
MPVOLSER 220,=,6,CH	VOLUME SERIAL - 220	78120000
MPRACK_220,*,6,CH	RACK NUMBER - 220	78156000
MPFEAT_220,*,4,CH	FEATURE CODE - 220	78192000
MPUNIT_220,*,8,CH	UNIT TYPE - 220	78228000
SKIP,8	RESERVED	78264000
MPVOLENT 221,*,32	VOLUME ENTRY - 221	78300000
MPVOLSER 221,=,6,CH	VOLUME SERIAL - 221	78336000
MPRACK_221,*,6,CH	RACK NUMBER - 221	78372000
MPFEAT_221,*,4,CH	FEATURE CODE - 221	78408000
MPUNIT_221,*,8,CH	UNIT TYPE - 221	78444000
SKIP,8	RESERVED	78480000
MPVOLENT 222,*,32	VOLUME ENTRY - 222	78516000
MPVOLSER 222,=,6,CH	VOLUME SERIAL - 222	78552000
MPRACK_222,*,6,CH	RACK NUMBER - 222	78588000
MPFEAT_222,*,4,CH	FEATURE CODE - 222	78624000
MPUNIT_222,*,8,CH	UNIT TYPE - 222	78660000
SKIP,8	RESERVED	78696000
MPVOLENT 223,*,32	VOLUME ENTRY - 223	78732000
MPVOLSER 223,=,6,CH	VOLUME SERIAL - 223	78768000
MPRACK_223,*,6,CH	RACK NUMBER - 223	78804000
MPFEAT_223,*,4,CH	FEATURE CODE - 223	78840000
MPUNIT_223,*,8,CH	UNIT TYPE - 223	78876000
SKIP,8	RESERVED	78912000
MPVOLENT 224,*,32	VOLUME ENTRY - 224	78948000
MPVOLSER 224,=,6,CH	VOLUME SERIAL - 224	78984000
MPRACK_224,*,6,CH	RACK NUMBER - 224	79020000
MPFEAT_224,*,4,CH	FEATURE CODE - 224	79056000
MPUNIT_224,*,8,CH	UNIT TYPE - 224	79092000
SKIP,8	RESERVED	79128000
MPVOLENT 225,*,32	VOLUME ENTRY - 225	79164000
MPVOLSER 225,=,6,CH	VOLUME SERIAL - 225	79200000
MPRACK_225,*,6,CH	RACK NUMBER - 225	79236000
MPFEAT_225,*,4,CH	FEATURE CODE - 225	79272000
MPUNIT_225,*,8,CH	UNIT TYPE - 225	79308000
SKIP,8	RESERVED	79344000
MPVOLENT 226,*,32	VOLUME ENTRY - 226	79380000
MPVOLSER 226,=,6,CH	VOLUME SERIAL - 226	79416000

MPRACK_226,* ,6,CH	RACK NUMBER - 226	79452000
MPFEAT_226,* ,4,CH	FEATURE CODE - 226	79488000
MPUNIT_226,* ,8,CH	UNIT TYPE - 226	79524000
SKIP,8	RESERVED	79560000
MPVOLENT_227,* ,32	VOLUME ENTRY - 227	79596000
MPVOLSER_227,=,6,CH	VOLUME SERIAL - 227	79632000
MPRACK_227,* ,6,CH	RACK NUMBER - 227	79668000
MPFEAT_227,* ,4,CH	FEATURE CODE - 227	79704000
MPUNIT_227,* ,8,CH	UNIT TYPE - 227	79740000
SKIP,8	RESERVED	79776000
MPVOLENT_228,* ,32	VOLUME ENTRY - 228	79812000
MPVOLSER_228,=,6,CH	VOLUME SERIAL - 228	79848000
MPRACK_228,* ,6,CH	RACK NUMBER - 228	79884000
MPFEAT_228,* ,4,CH	FEATURE CODE - 228	79920000
MPUNIT_228,* ,8,CH	UNIT TYPE - 228	79956000
SKIP,8	RESERVED	79992000
MPVOLENT_229,* ,32	VOLUME ENTRY - 229	80028000
MPVOLSER_229,=,6,CH	VOLUME SERIAL - 229	80064000
MPRACK_229,* ,6,CH	RACK NUMBER - 229	80100000
MPFEAT_229,* ,4,CH	FEATURE CODE - 229	80136000
MPUNIT_229,* ,8,CH	UNIT TYPE - 229	80172000
SKIP,8	RESERVED	80208000
MPVOLENT_230,* ,32	VOLUME ENTRY - 230	80244000
MPVOLSER_230,=,6,CH	VOLUME SERIAL - 230	80280000
MPRACK_230,* ,6,CH	RACK NUMBER - 230	80316000
MPFEAT_230,* ,4,CH	FEATURE CODE - 230	80352000
MPUNIT_230,* ,8,CH	UNIT TYPE - 230	80388000
SKIP,8	RESERVED	80424000
MPVOLENT_231,* ,32	VOLUME ENTRY - 231	80460000
MPVOLSER_231,=,6,CH	VOLUME SERIAL - 231	80496000
MPRACK_231,* ,6,CH	RACK NUMBER - 231	80532000
MPFEAT_231,* ,4,CH	FEATURE CODE - 231	80568000
MPUNIT_231,* ,8,CH	UNIT TYPE - 231	80604000
SKIP,8	RESERVED	80640000
MPVOLENT_232,* ,32	VOLUME ENTRY - 232	80676000
MPVOLSER_232,=,6,CH	VOLUME SERIAL - 232	80712000
MPRACK_232,* ,6,CH	RACK NUMBER - 232	80748000
MPFEAT_232,* ,4,CH	FEATURE CODE - 232	80784000
MPUNIT_232,* ,8,CH	UNIT TYPE - 232	80820000
SKIP,8	RESERVED	80856000
MPVOLENT_233,* ,32	VOLUME ENTRY - 233	80892000
MPVOLSER_233,=,6,CH	VOLUME SERIAL - 233	80928000
MPRACK_233,* ,6,CH	RACK NUMBER - 233	80964000
MPFEAT_233,* ,4,CH	FEATURE CODE - 233	81000000
MPUNIT_233,* ,8,CH	UNIT TYPE - 233	81036000
SKIP,8	RESERVED	81072000
MPVOLENT_234,* ,32	VOLUME ENTRY - 234	81108000
MPVOLSER_234,=,6,CH	VOLUME SERIAL - 234	81144000
MPRACK_234,* ,6,CH	RACK NUMBER - 234	81180000
MPFEAT_234,* ,4,CH	FEATURE CODE - 234	81216000
MPUNIT_234,* ,8,CH	UNIT TYPE - 234	81252000
SKIP,8	RESERVED	81288000
MPVOLENT_235,* ,32	VOLUME ENTRY - 235	81324000
MPVOLSER_235,=,6,CH	VOLUME SERIAL - 235	81360000
MPRACK_235,* ,6,CH	RACK NUMBER - 235	81396000
MPFEAT_235,* ,4,CH	FEATURE CODE - 235	81432000
MPUNIT_235,* ,8,CH	UNIT TYPE - 235	81468000
SKIP,8	RESERVED	81504000
MPVOLENT_236,* ,32	VOLUME ENTRY - 236	81540000
MPVOLSER_236,=,6,CH	VOLUME SERIAL - 236	81576000
MPRACK_236,* ,6,CH	RACK NUMBER - 236	81612000
MPFEAT_236,* ,4,CH	FEATURE CODE - 236	81648000
MPUNIT_236,* ,8,CH	UNIT TYPE - 236	81684000
SKIP,8	RESERVED	81720000
MPVOLENT_237,* ,32	VOLUME ENTRY - 237	81756000
MPVOLSER_237,=,6,CH	VOLUME SERIAL - 237	81792000
MPRACK_237,* ,6,CH	RACK NUMBER - 237	81828000

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MPFEAT_237,* ,4,CH	FEATURE CODE - 237	81864000
MPUNIT_237,* ,8,CH	UNIT TYPE - 237	81900000
SKIP,8	RESERVED	81936000
MPVOLENT_238,* ,32	VOLUME ENTRY - 238	81972000
MPVOLSÉR_238,=,6,CH	VOLUME SERIAL - 238	82008000
MPRACK_238,* ,6,CH	RACK NUMBER - 238	82044000
MPFEAT_238,* ,4,CH	FEATURE CODE - 238	82080000
MPUNIT_238,* ,8,CH	UNIT TYPE - 238	82116000
SKIP,8	RESERVED	82152000
MPVOLENT_239,* ,32	VOLUME ENTRY - 239	82188000
MPVOLSÉR_239,=,6,CH	VOLUME SERIAL - 239	82224000
MPRACK_239,* ,6,CH	RACK NUMBER - 239	82260000
MPFEAT_239,* ,4,CH	FEATURE CODE - 239	82296000
MPUNIT_239,* ,8,CH	UNIT TYPE - 239	82332000
SKIP,8	RESERVED	82368000
MPVOLENT_240,* ,32	VOLUME ENTRY - 240	82404000
MPVOLSÉR_240,=,6,CH	VOLUME SERIAL - 240	82440000
MPRACK_240,* ,6,CH	RACK NUMBER - 240	82476000
MPFEAT_240,* ,4,CH	FEATURE CODE - 240	82512000
MPUNIT_240,* ,8,CH	UNIT TYPE - 240	82548000
SKIP,8	RESERVED	82584000
MPVOLENT_241,* ,32	VOLUME ENTRY - 241	82620000
MPVOLSÉR_241,=,6,CH	VOLUME SERIAL - 241	82656000
MPRACK_241,* ,6,CH	RACK NUMBER - 241	82692000
MPFEAT_241,* ,4,CH	FEATURE CODE - 241	82728000
MPUNIT_241,* ,8,CH	UNIT TYPE - 241	82764000
SKIP,8	RESERVED	82800000
MPVOLENT_242,* ,32	VOLUME ENTRY - 242	82836000
MPVOLSÉR_242,=,6,CH	VOLUME SERIAL - 242	82872000
MPRACK_242,* ,6,CH	RACK NUMBER - 242	82908000
MPFEAT_242,* ,4,CH	FEATURE CODE - 242	82944000
MPUNIT_242,* ,8,CH	UNIT TYPE - 242	82980000
SKIP,8	RESERVED	83016000
MPVOLENT_243,* ,32	VOLUME ENTRY - 243	83052000
MPVOLSÉR_243,=,6,CH	VOLUME SERIAL - 243	83088000
MPRACK_243,* ,6,CH	RACK NUMBER - 243	83124000
MPFEAT_243,* ,4,CH	FEATURE CODE - 243	83160000
MPUNIT_243,* ,8,CH	UNIT TYPE - 243	83196000
SKIP,8	RESERVED	83232000
MPVOLENT_244,* ,32	VOLUME ENTRY - 244	83268000
MPVOLSÉR_244,=,6,CH	VOLUME SERIAL - 244	83304000
MPRACK_244,* ,6,CH	RACK NUMBER - 244	83340000
MPFEAT_244,* ,4,CH	FEATURE CODE - 244	83376000
MPUNIT_244,* ,8,CH	UNIT TYPE - 244	83412000
SKIP,8	RESERVED	83448000
MPVOLENT_245,* ,32	VOLUME ENTRY - 245	83484000
MPVOLSÉR_245,=,6,CH	VOLUME SERIAL - 245	83520000
MPRACK_245,* ,6,CH	RACK NUMBER - 245	83556000
MPFEAT_245,* ,4,CH	FEATURE CODE - 245	83592000
MPUNIT_245,* ,8,CH	UNIT TYPE - 245	83628000
SKIP,8	RESERVED	83664000
MPVOLENT_246,* ,32	VOLUME ENTRY - 246	83700000
MPVOLSÉR_246,=,6,CH	VOLUME SERIAL - 246	83736000
MPRACK_246,* ,6,CH	RACK NUMBER - 246	83772000
MPFEAT_246,* ,4,CH	FEATURE CODE - 246	83808000
MPUNIT_246,* ,8,CH	UNIT TYPE - 246	83844000
SKIP,8	RESERVED	83880000
MPVOLENT_247,* ,32	VOLUME ENTRY - 247	83916000
MPVOLSÉR_247,=,6,CH	VOLUME SERIAL - 247	83952000
MPRACK_247,* ,6,CH	RACK NUMBER - 247	83988000
MPFEAT_247,* ,4,CH	FEATURE CODE - 247	84024000
MPUNIT_247,* ,8,CH	UNIT TYPE - 247	84060000
SKIP,8	RESERVED	84096000
MPVOLENT_248,* ,32	VOLUME ENTRY - 248	84132000
MPVOLSÉR_248,=,6,CH	VOLUME SERIAL - 248	84168000
MPRACK_248,* ,6,CH	RACK NUMBER - 248	84204000
MPFEAT_248,* ,4,CH	FEATURE CODE - 248	84240000

MPUNIT_248,*,8,CH	UNIT TYPE - 248	84276000
SKIP,8	RESERVED	84312000
MPVOLENT_249,*,32	VOLUME ENTRY - 249	84348000
MPVOLSER_249,=,6,CH	VOLUME SERIAL - 249	84384000
MPRACK_249,*,6,CH	RACK NUMBER - 249	84420000
MPFEAT_249,*,4,CH	FEATURE CODE - 249	84456000
MPUNIT_249,*,8,CH	UNIT TYPE - 249	84492000
SKIP,8	RESERVED	84528000
MPVOLENT_250,*,32	VOLUME ENTRY - 250	84564000
MPVOLSER_250,=,6,CH	VOLUME SERIAL - 250	84600000
MPRACK_250,*,6,CH	RACK NUMBER - 250	84636000
MPFEAT_250,*,4,CH	FEATURE CODE - 250	84672000
MPUNIT_250,*,8,CH	UNIT TYPE - 250	84708000
SKIP,8	RESERVED	84744000
MPVOLENT_251,*,32	VOLUME ENTRY - 251	84780000
MPVOLSER_251,=,6,CH	VOLUME SERIAL - 251	84816000
MPRACK_251,*,6,CH	RACK NUMBER - 251	84852000
MPFEAT_251,*,4,CH	FEATURE CODE - 251	84888000
MPUNIT_251,*,8,CH	UNIT TYPE - 251	84924000
SKIP,8	RESERVED	84960000
MPVOLENT_252,*,32	VOLUME ENTRY - 252	84996000
MPVOLSER_252,=,6,CH	VOLUME SERIAL - 252	85032000
MPRACK_252,*,6,CH	RACK NUMBER - 252	85068000
MPFEAT_252,*,4,CH	FEATURE CODE - 252	85104000
MPUNIT_252,*,8,CH	UNIT TYPE - 252	85140000
SKIP,8	RESERVED	85176000
MPVOLENT_253,*,32	VOLUME ENTRY - 253	85212000
MPVOLSER_253,=,6,CH	VOLUME SERIAL - 253	85248000
MPRACK_253,*,6,CH	RACK NUMBER - 253	85284000
MPFEAT_253,*,4,CH	FEATURE CODE - 253	85320000
MPUNIT_253,*,8,CH	UNIT TYPE - 253	85356000
SKIP,8	RESERVED	85392000
MPVOLENT_254,*,32	VOLUME ENTRY - 254	85428000
MPVOLSER_254,=,6,CH	VOLUME SERIAL - 254	85464000
MPRACK_254,*,6,CH	RACK NUMBER - 254	85500000
MPFEAT_254,*,4,CH	FEATURE CODE - 254	85536000
MPUNIT_254,*,8,CH	UNIT TYPE - 254	85572000
SKIP,8	RESERVED	85608000
MPVOLENT_255,*,32	VOLUME ENTRY - 255	85644000
MPVOLSER_255,=,6,CH	VOLUME SERIAL - 255	85680000
MPRACK_255,*,6,CH	RACK NUMBER - 255	85716000
MPFEAT_255,*,4,CH	FEATURE CODE - 255	85752000
MPUNIT_255,*,8,CH	UNIT TYPE - 255	85788000
SKIP,8	RESERVED	85824000
*****		85860000
* END OF PROGRAM PRODUCT INFORMATION		* 85896000
*****		85932000
MPRCEND,*	END OF MPREC	85968000
*		86004000
POSITION,SMFADREC	START AFTER EDGSMFAR	86040000
*****		86076000
* KEY FIELD		* 86112000
*****		86148000
MRKEY,=,56	KEY FIELD	86184000
MRTYPE,=,1,CH	RECORD TYPE	86220000
MRTYPEE,'E'	EMPTY RACK	86256000
MRTYPEF,'F'	FREE/SCRATCH RACK	86292000
MRTYPEU,'U'	IN USE RACK	86328000
SKIP,1	RESERVED	86364000
MRMEDIA,*,8,CH	MEDIA NAME	86400000
MRUNIT,=,8,CH	UNIT TYPE	86436000
MRRACK,*,6,CH	RACK NUMBER	86472000
SKIP,40	RESERVED	86508000
*****		86544000
* CONTROL INFORMATION		* 86580000
*****		86616000
MRRECLN,*,2,FI	RECORD LENGTH	86652000

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SKIP,2	RESERVED	86688000
MRCRDATE,*,4,PD	RACK CREATE DATE - YYYYDDD	86724000
MRCRTIME,*,4,PD	RACK CREATE TIME - HHMSST	86760000
MRCRSID,*,8,CH	CREATE SYSTEM ID	86796000
MRRCCDS,*,8,CH	RECORD CREATE CDS ID	86832000
MRLCDATE,*,4,PD	LAST CHANGE DATE - YYYYDDD	86868000
MRLCTIME,*,4,PD	LAST CHANGE TIME - HHMSST	86904000
MRLCUID,*,8,CH	LAST CHANGE USER ID	86940000
MRLCSID,*,8,CH	LAST CHANGE SYSTEM ID	86976000
MRUCDATE,*,4,PD	LAST "USER" CHANGE DATE	87012000
MRLCTIME,*,4,PD	LAST "USER" CHANGE TIME	87048000
MRCFLG,*,1,BI	CONTROL FLAGS 1	87084000
MRDELFLG,X'80'	RECORD DELETED	87120000
MRSELFLG,X'10'	SELECT - PROC BY SATELLITE UPDT	87156000
MRDUMMY,X'08'	DUMMY RECORD - ALLOW TSO ADD	87192000
SKIP,7	RESERVED	87228000
*****	*****	87264000
* RACK INFORMATION		* 87300000
*****	*****	87336000
MRVOLSER,*,6,CH	ASSIGNED VOLSER OR ZEROS	87372000
SKIP,10	RESERVED	87408000
*****	*****	87444000
* END OF RACK INFORMATION		* 87480000
*****	*****	87516000
MRRCEM,*,1,CH	END OF MRRC	87552000
*****	*****	87588000
* END OF RMM MRREC		* 87624000
*****	*****	87660000
* POSITION,SMFADREC	START AFTER EDGSMFAR	87696000
*****	*****	87732000
* KEY FIELD		* 87804000
*****	*****	87840000
MSKEY,=,56	KEY FIELD	87876000
MSTYPE,=,1,CH	RECORD TYPE	87912000
MSTYPER,'R'	EMPTY BIN	87948000
MSTYPES,'S'	ASSIGNED BIN	87984000
MSRMSTID,*,1,CH	REMOTE STORE ID	88020000
MSSTIDD,'D'	DISTANT STORE	88056000
MSSTIDL,'L'	LOCAL STORE	88092000
MSSTIDR,'R'	REMOTE STORE	88128000
MSSTIDU,'U'	USER DEFINED STORE	88164000
SKIP,8	RESERVED	88200000
MSBINNO,*,6,CH	BIN NUMBER	88236000
SKIP,40	RESERVED	88272000
MSUSTNAM,*,8,CH	INSTALLATION DEFINED STORE NAME	88308000
MSUMEDNM,*,8,CH	INSTALLATION DEFINED STORE BIN MEDIA NAME	88344000
MSUBINNO,*,6,CH	INSTALLATION DEFINED STORE BIN NUMBER	88380000
*****	*****	88416000
* CONTROL INFORMATION		* 88452000
*****	*****	88488000
MSRECLN,*,2,FI	RECORD LENGTH	88524000
SKIP,2	RESERVED	88560000
MSCRDATE,*,4,PD	CREATE DATE - YYYYDDD	88596000
MSCRTIME,*,4,PD	CREATE TIME - HHMSST	88632000
MSCRSID,*,8,CH	CREATE SYSTEM ID	88668000
MSRCCDS,*,8,CH	RECORD CREATE CDS ID	88704000
MSLDATE,*,4,PD	LAST CHANGE DATE - YYYYDDD	88740000
MSLCTIME,*,4,PD	LAST CHANGE TIME - HHMSST	88776000
MSLCUID,*,8,CH	LAST CHANGE USER ID	88812000
MSLCSID,*,8,CH	LAST CHANGE SYSTEM ID	88848000
MSUCDATE,*,4,PD	LAST "USER" CHANGE DATE	88884000
MSUCTIME,*,4,PD	LAST "USER" CHANGE TIME	88920000
MSCFLG,*,1,BI	CONTROL FLAGS 1	88956000
MSDELFLG,X'80'	RECORD DELETED	88992000
MSELFLG,X'10'	SELECT - PROC BY SATELLITE UPDT	89028000
MSDUMMY,X'08'	DUMMY RECORD - ALLOW TSO ADD	89064000

SKIP,7	RESERVED	89100000
*****		89136000
* STORE INFORMATION		* 89172000
*****		89208000
MSVOLSER,*,6,CH	ASSIGNED VOLSER OR ZEROS	89244000
SKIP,10	RESERVED	89280000
MSMOVINGINVOL,*,6,CH	MOVING-IN VOLUME	§SCA 89287200
MSMOVINGOUTVOL,*,6,CH	MOVING-OUT VOLUME	§SCA 89294400
MSOLDVOL,*,6,CH	OLD VOLUME	§SCA 89301600
SKIP,6	RESERVED	§SCA 89308800
*****		89316000
* END OF DISASTER STORE BIN INFORMATION		* 89352000
*****		89388000
MSRCEND,*	END OF MSRC	89424000
*****		89460000
* END OF RMM MSREC		* 89496000
*****		89532000
*		89568000
POSITION,SMFADREC	START AFTER EDGSMFAR	89604000
*****		89640000
* KEY FIELD		* 89676000
*****		89712000
MVKEY,=,56	KEY FIELD	89748000
MVTYPE,=,1,CH	RECORD TYPE	89784000
MVTYPEID,'V'	VOLUME INFO ID SYMBOL	89820000
SKIP,1	RESERVED	89856000
MVVOLSER,*,6,CH	VOLUME SERIAL NUMBER	89892000
SKIP,48	RESERVED	89928000
*****		89964000
* CONTROL INFORMATION		* 90000000
*****		90036000
MVRECLN,*,2,FI	RECORD LENGTH	90072000
SKIP,2	RESERVED	90108000
MVCRDATE,*,4,PD	VOL CREATE DATE - YYYYDDD	90144000
MVCRTIME,*,4,PD	VOL CREATE TIME - HHMMSS	90180000
MVCRSID,*,8,CH	CREATE SYSTEM ID	90216000
MVRCCDS,*,8,CH	RECORD CREATE CDS ID	90252000
MVLCDATE,*,4,PD	LAST CHANGE DATE - YYYYDDD	90288000
MVLCTIME,*,4,PD	LAST CHANGE TIME - HHMMSS	90324000
MVLCUID,*,8,CH	LAST CHANGE USER ID	90360000
MVLCSID,*,8,CH	LAST CHANGE SYSTEM ID	90396000
MVUCDATE,*,4,PD	LAST "USER" CHANGE DATE	90432000
MVUCTIME,*,4,PD	LAST "USER" CHANGE TIME	90468000
MVCFLG,*,1,BI	CONTROL FLAGS 1	90504000
MVDELFLG,X'80'	RECORD DELETED	90540000
MVPDLFLG,X'40'	RECORD PREVIOUSLY DELETED	90576000
MVSELFLG,X'10'	SELECT - PROC BY SATELLITE UPDT	90612000
MVDUMMY,X'08'	DUMMY RECORD - ALLOW TSO ADD	90648000
MVRECLEV,*,1,BI	RECORD LEVEL NUMBER	90684000
SKIP,6	RESERVED	90720000
*****		90756000
* VOLUME INFORMATION		* 90792000
*****		90828000
MVEXPDTO,*,4,PD	EXPIRATION DATE - ORIGINAL	90864000
MVEXPDT,*,4,PD	EXPIRATION DATE - YYYYDDD	90900000
MVRDEN,*,1,BI	COPY OF JFCBDEN	90936000
MVDEN,*,1,CH	RECORDING DENSITY	90972000
MVDEN3,'3'	1600BPI	91008000
MVDEN4,'4'	6250BPI	91044000
MVDEN9,'9'	3480	91080000
MVDENC,'C'	3480 COMPACTED (IDRC)	91116000
MVDENU,'*'	UNDEFINED	91152000
MVDSNNO,*,2,BI	NUMBER OF DATASETS ON VOLUME	§LLC 91188000
MVTUSE,*,4,FI	TAPE USAGE IN KBYTES	91224000
MVUSE,*,2,FI	VOLUME USE COUNT	91260000
MVSTAT,*,1,BI	STORE STATUS	91296000
MVSTS001,X'01'	TAPE LIB TO REMOTE STORE	91332000

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MVSTS002,X'02'	REMOTE STORE TO TAPE LIB	91368000
MVSTS003,X'03'	TAPE LIB TO LOCAL STORE	91404000
MVSTS004,X'04'	LOCAL STORE TO TAPE LIB	91440000
MVSTS005,X'05'	LOCAL STORE TO DISTANT	91476000
MVSTS006,X'06'	TAPE LIB TO DISTANT STORE	91512000
MVSTS007,X'07'	DISTANT STORE TO TAPE LIB	91548000
MVSTS009,X'09'	STORE LOCATION VALID	91584000
MVRSREL,*,1,BI	VRS RELEASE OPTIONS	91620000
MVRFXDI,B'1.....'	EXPIRY DATE IGNORE	91656000
MVRFSCI,B'.1.....'	SCRATCH IMMEDIATE	91692000
* FLAG BITS IN MVRSREL SHOULD MATCH MKRISOPT BIT SETTINGS.		91728000
MVLBN01,*,2,BI	LABEL NUMBER OF 1ST FILE	\$LLC 91764000
MVTDI,*,4	TAPE MEDIA TYPE INFORMATION	91800000
MVMEDREC,=,1,BI	VOL RECORDING FORMAT	91836000
MVMRCU,X'00'	NON CARTRIDGE	91872000
MVMRC18,X'01'	18TRACK	91908000
MVMRC36,X'02'	36TRACK	91944000
MVMRC128,X'03'	128TRACK	91980000
MVMRC256,X'04'	256TRACK	92016000
MVMRC384,X'05'	384TRACK	\$SEA 92034000
MVMEDTY,*,1,BI	TAPE MEDIA TYPE	92052000
MVMTYU,X'00'	UNKNOWN	92088000
MVMTYCS,X'01'	CST	92124000
MVMTYEC,X'02'	ECST	92160000
MVMTYHP,X'03'	HPCT	92196000
MVMTYEH,X'04'	EHPCT	92232000
MVMEDCMP,*,1,BI	TAPE COMPACTION	92268000
MVMCMU,X'00'	UNKNOWN	92304000
MVMCMNC,X'01'	NOT COMPACTED	92340000
MVMCMC,X'02'	COMPACTED	92376000
MVMEDATR,*,1,BI	TAPE SPECIAL ATTRIBUTES	92412000
MVMATN,X'00'	NONE	92448000
MVMAT18,X'01'	18 TRACK READ ONLY	92484000
MVSTORID,*,1,CH	STORE LOCATION ID	92520000
MVSTIDD,'D'	DISTANT STORE	92556000
MVSTIDL,'L'	LOCAL STORE	92592000
MVSTIDR,'R'	REMOTE STORE	92628000
MVSTIDT,'T'	TAPE LIBRARY	92664000
MVNSTRID,*,1,CH	NEW STORE LOCATION	92700000
MVNLOC,*,8,CH	DESIRED LOCATION NAME	92736000
MVSTBIN,*,4,FI	STORE BIN NUMBER	92772000
MVOBIN,*,4,FI	OLD BIN NUMBER	92808000
MVSTDATE,*,4,PD	DATE STORED (YYYYDDD)	92844000
MVLUDEV,*,4,CH	LAST USED DEVICE	92880000
MVLONLOC,*,8,CH	LOAN LOCATION	92916000
MVOLNLOC,*,8,CH	OLD LOAN LOCATION	92952000
MVLRDDAT,*,4,PD	DATE VOLUME LAST READ (YYYYDDD)	92988000
MVLWTDAT,*,4,PD	DATE VOLUME LAST WRITTEN	93024000
MVASDATM,*,8	ASSIGNED DATE AND TIME	93060000
MVASDATE,=,4,PD	ASSIGNED DATE (YYYYDDD)	93096000
MVASTIME,*,4,PD	ASSIGNED TIME (HHMMSS)	93132000
MVOWNID,*,8,CH	VOLUME OWNER USERID	93168000
MVCRUID,*,8,CH	CREATING USERID	93204000
MVCRJOB,*,8,CH	CREATING JOBNAME	93240000
MVSECLEV,*,1,BI	SECURITY CLASSIFICATION LEVEL	93276000
MVFLGAX,*,1,BI	FLAGS 'A' - STATUS EXTENSION	93312000
MVGVCFLG,B'1.....'	SCRATCH VOL CLAIMED VIA GETVOL	93348000
MVXINFLG,B'.1.....'	SCRATCH VOLUME HAS NEVER BEEN INITIALISED	93384000
MVINIFLG,B'..1.....'	SCRATCH VOLUME WITH INIT ACTION PENDING	93420000
MVENTFLG,B'...1.....'	SCRATCH VOLUME WAITING TO ENTER ATL	93456000
MVFABEND,B'....1...'	ABEND IN PROCESS WHEN A DATA SET CLOSED	93492000
MVFOCEAB,B'.....1..'	ABEND PROBABLY IN O/C/EV	93528000
MVATIFLG,B'.....1..'	INIT REQUESTED FOR ATL VOL	93564000
MVFORCE,B'.....1..'	FORCE SUPPLIED	93600000
MVVOLSEQ,*,2,FI	VOLUME SEQUENCE NUMBER	93636000
*****		93672000
* VOLUME FLAGS		* 93708000

*****	93744000
MVFLGA,*,1,BI	FLAGS 'A' - STATUS
MVMSTFLG,B'1.....'	VOLUME IS MASTER
MVRLSFLG,B'.1.....'	VOLUME PENDING RELEASE
MVVRFLG,B'..1.....'	VITAL RECORD - DO NOT RELEASE
MVASSFLG,B'...1....'	USER TAPE (ASSIGNED BY LIB)
MVLONFLG,B'....1....'	TAPE IS ON LOAN
MVOPNFLG,B'.....1..'	TAPE OPENED AND NOT YET CLOSED
MVSCRFLG,B'.....1.'	VOLUME IS SCRATCH
MVOCEFLG,B'.....1.'	VOLUME RECORDED BY O/C/EOV
MVEXRFLG,B'.....1.'	STV RECORDED BY EXPORT
MVFLGB,*,1,BI	FLAGS 'B'
MVDEFRET,B'1.....'	DEFAULT RETENTION PERIOD USED
MVPPTAPE,B'.1.....'	PROGRAM PRODUCT TAPE
MVNLTAPE,B'..1.....'	LABEL TYPE IS NL
MVALTAPE,B'...1....'	LABEL TYPE IS AL
MVSLTAPE,B'....1....'	LABEL TYPE IS SL
MVBLTAPE,B'.....1.'	TAPE LAST WRITTEN USING BLP
MVULTAPE,B'.....1.'	SL OR AL TAPE HAS USER LABELS
MVFLGC,*,1,BI	FLAGS 'C' - RELEASE ACTIONS
MVRETSCR,B'1.....'	RETURN TO SCRATCH POOL - DEFAULT
MVREACT,B'.1111111'	RELEASE ACTIONS
MVREPREL,B'.1.....'	REPLACE TAPE ON RELEASE
MVREINIT,B'..1.....'	REINITIALISE
MVDEGAUS,B'...1....'	DEGAUS/SECURITY ERASE
MVROWNER,B'....1....'	RETURN TO OWNER
MVNOWNER,B'.....1..'	NOTIFY OWNER
MVFLGD,*,1,BI	FLAGS 'D' - ACCESS
MVOREAD,B'1.....'	OWNER MAY READ VOLUME
MVOUPD,B'.1.....'	OWNER MAY UPDATE VOLUME
MVOALT,B'..1.....'	OWNER MAY ALTER VOLUME
MVPROTR,B'...1....'	READ-ONLY PROTECTION
MVPROTU,B'....1....'	UPDATE PROTECTION
MVMVSUSE,B'.....1..'	MAY BE USED ON MVS SYSTEMS
MVMVUSE,B'.....1.'	MAY BE USED ON VM SYSTEMS
MVNODSNR,B'.....1.'	ONLY 1ST TAPE DS RECORDED
MVFLGE,*,1,BI	FLAGS 'E' - ACTIONS PENDING
* MVRETSCR,B'1.....'	RETURN TO SCRATCH POOL - DEFAULT
* MVREACT,B'.1111111'	RELEASE ACTIONS
* MVREPREL,B'.1.....'	REPLACE TAPE ON RELEASE
* MVREINIT,B'..1.....'	REINITIALISE
* MVDEGAUS,B'...1....'	DEGAUS/SECURITY ERASE
* MVROWNER,B'....1....'	RETURN TO OWNER
* MVNOWNER,B'.....1..'	NOTIFY OWNER
MVLTYP,*,1,BI	COPY OF JFCBLTYP
MVALVERS,*,2,CH	ANSI LABEL VERSION
MVALCUR,=,1,FI	CURRENT LABEL VERSION
MVALREQ,*,1,FI	REQUIRED LABEL VERSION
MVMEDIA,*,8,CH	INSTALLATIONS MEDIA NAME
MVUNIT,=,8,CH	UNIT TYPE
MVRACK,*,6,CH	RACK NUMBER
MVPVOL,*,6,CH	PREVIOUS VOLSER IF MULTI-VOL
MVNVOL,*,6,CH	NEXT VOLSER IF MULTI-VOL
MVUCBTYP,*,4,BI	COPY OF UCBTYP FIELD FROM UCB
MVERRCNT,*,8	ERROR COUNTS
MVTRERR,=,2,FI	TEMPORARY READ ERRORS
MVTWERR,*,2,FI	TEMPORARY WRITE ERRORS
MVPRERR,*,2,FI	PERMANENT READ ERRORS
MVPWERR,*,2,FI	PERMANENT WRITE ERRORS
MVBLKID,*,4,CH	BLOCKID RETURNED BY OCE EX\$LEC
MVPPDATA,*,18	PROGRAM PRODUCT DATA
MVPPNUM,=,8,CH	PROGRAM PRODUCT NUMBER
MVVER,*,6,CH	VERSION/RELEASE/MOD NUMBER
MVFEAT,*,4,CH	FEATURE CODE
MVTRTCH,*,1,BI	FROM JFCRTCH - IDRC SUPPORT
MVTCOMP,X'08'	DSN USED 3480 IDRC
MVTNCOMP,X'04'	NO COMPACTION
	96120000

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MVOPVOL,* ,6,CH	OLD PREVIOUS VOLUME	96156000
MVTOKEN,* ,8,CH	RESERVED FOR O/C/EOV	96192000
MVLOCFLG,* ,1,BI	FLAG BYTE FOR LIBRARY SUPPORT	96228000
MVTRNFLG,B'1.....'	INDICATES VOLUME IN TRANSIT	96264000
* MVMVMODE,B'.1.....'	WHEN NOT SET, VOLUME IS IN LOCATION	96300000
* MVMVMODE,B'.1.....'	INDICATES MANUALMOVE	96336000
* MVMVMODE,B'.1.....'	WHEN NOT SET, INDICATES AUTOMOVE	96372000
MVEXTBINAPPLIED,B'..1.....'	EXTENDED BIN APPLIED	§SCA 96390000
MVLTSHL,B'....0000'	SHELF LOCATION	96408000
MVLTSTG,B'....0001'	STORAGE LOCATION	96444000
MVLTMAN,B'....0010'	MANUAL LIBRARY	96480000
MVLTAUT,B'....0011'	AUTOMATIC LIBRARY	96516000
MVLTSTB,B'....0100'	STORE WITH BINS	96552000
MVLTSTB,B'....0101'	STORE WITHOUT BINS	96588000
MVTYPFLG,* ,1,BI	FLAGS FOR LOCATION TYPE INFORMATION	96624000
MVNTSHL,B'0000....'	SHELF LOCATION	96660000
MVNTSTG,B'0001....'	STORAGE LOCATION	96696000
MVNTMAN,B'0010....'	MANUAL LIBRARY	96732000
MVNTAUT,B'0011....'	AUTOMATIC LIBRARY	96768000
MVNTSTB,B'0100....'	STORE WITH BINS	96804000
MVNTSTB,B'0101....'	STORE WITHOUT BINS	96840000
MVDTSHL,B'....0000'	SHELF LOCATION	96876000
MVDTSTG,B'....0001'	STORAGE LOCATION	96912000
MVDTMAN,B'....0010'	MANUAL LIBRARY	96948000
MVDTAUT,B'....0011'	AUTOMATIC LIBRARY	96984000
MVDTSTB,B'....0100'	STORE WITH BINS	97020000
MVDTSTB,B'....0101'	STORE WITHOUT BINS	97056000
MVTYP2FLG,* ,1,BI	MORE FLAGS FOR TYPES	97092000
MVHTSHL,B'0000....'	SHELF LOCATION	97128000
MVHTSTG,B'0001....'	STORAGE LOCATION	97164000
MVHTMAN,B'0010....'	MANUAL LIBRARY	97200000
MVHTAUT,B'0011....'	AUTOMATIC LIBRARY	97236000
MVHTSTB,B'0100....'	STORE WITH BINS	97272000
MVHTSTB,B'0101....'	STORE WITHOUT BINS	97308000
MVOTSHL,B'....0000'	SHELF LOCATION	§SCA 97313100
MVOTSTG,B'....0001'	STORAGE LOCATION	§SCA 97318200
MVOTMAN,B'....0010'	MANUAL LIBRARY	§SCA 97323300
MVOTAUT,B'....0011'	AUTOMATIC LIBRARY	§SCA 97328400
MVOTSTB,B'....0100'	STORE WITH BINS	§SCA 97333500
MVOTSTB,B'....0101'	STORE WITHOUT BINS	§SCA 97338600
MVRQPRTY,* ,2,FI	REQ.LOCATION PRIORITY	97344000
MVCAPACITY,* ,4,FI	VOLUME CAPACITY IN MBYTES	97380000
MVHLOC,* ,8,CH	HOME LOCATION NAME	97416000
MVSGNAME,* ,8,CH	STORAGE GROUP NAME	97452000
MVLOC,* ,8,CH	LOCATION NAME	97488000
MVDEST,* ,8,CH	DESTINATION NAME	97524000
MVOLOC,* ,8,CH	PREVIOUS LOCATION NAME	97560000
MVUSBIN,* ,6,CH	SHELF MANAGED STORE BIN NO.	97596000
MVUBMDN,* ,8,CH	BIN MEDIA NAME	97632000
MVUSOBIN,* ,6,CH	SHELF MANAGED STORE OLD BIN	97668000
MVUOBMDN,* ,8,CH	OLD BIN MEDIA NAME	97704000
MVRETDAT,* ,4,PD	RETENTION DATE	97740000
MVOLDVOLSER,* ,6,CH	OLD VOLSER IF RENAMING VOLSER	§LSC 97776000
MVOLDRACK,* ,6,CH	OLD RACK IF RENAMING VOLSER	§LSC 97812000
MVLCTOKN,* ,8,CH	VOLUME LAST CHANGE TOKEN	97848000
MVVOLTYPE,* ,1,FI	VOLUME TYPE	97884000
MVVOLTYPE_PHYSICAL,0	VOLUME TYPE PHYSICAL	97920000
MVVOLTYPE_LOGICAL,1	VOLUME TYPE LOGICAL	97956000
MVVOLTYPE_STACKED,2	VOLUME TYPE STACKED	97992000
MVFLGF,* ,1,BI	FLAGS 'F'	98028000
MVRBYSET,X'80'	RETAINED BY SET	98064000
*****		98100000
* LEVEL 1 FIXED LENGTH SECTION (62 BYTES)		* 98136000
*****		98172000
MVLEV1SC,* ,62	LEVEL 1 SECTION	98208000
MVDCRSID,* ,8,CH	1ST DATA SET CREATE SYSID	98244000
MVCONTAINER,* ,16,CH	CONTAINER	98280000

MVCONTAINER_STV,=,8,CH	STACKED VOLUME CONTAINER		98316000
MVOLD_CONTAINER,*,16,CH	OLD CONTAINER		98352000
MVEXPTOKEN,*,8,CH	EXPORT TOKEN		98388000
SKIP,9	RESERVED		98424000
MVLAST_POSN,*,1,FI	LAST FILE END MEDIA POSITION		98460000
MV_STV_VOLCOUNT,*,4,FI	STACKED VOLUME COUNT		98496000
*****			98532000
* LEVEL 2 FIXED LENGTH SECTION (64 BYTES)		*	98537100
*****			98542200
MVDESTBIN,*,6,CH	DESTINATION BIN NUMBER	\$SCA	98547300
MVDESTBINMEDIA,*,8,CH	DESTINATION BIN MEDIANAME	\$SCA	98552400
MVVOL1,*,6,CH	CURRENT VOL1 LABEL VOLSER	\$LSA	98555800
SKIP,44	RESERVED	\$LSA	98559200
*****			98562600
* VARIABLE LENGTH SECTION		*	98568000
*****			98604000
MVVARSEC,*,268	VARIABLE LENGTH SECTION		98640000
MVDSN1L,=,1,BI	LENGTH OF FIRST DSNAME ON TAPE		98676000
MVDSNLL,*,1,BI	LENGTH OF LAST DSNAME ON TAPE		98712000
MVACCLN,*,1,BI	LENGTH OF A/C FIELD (OR ZERO)		98748000
MVUSELEN,*,1,BI	LENGTH OF USER DATA (OR ZERO)		98784000
MVACCLST,*,1,BI	NUMBER OF ACCESS LIST ENTRIES		98820000
SKIP,7	RESERVED		98856000
MVDSN1,*,44,CH	DSNAME OF FIRST FILE ON TAPE		98892000
MVDSNL,*,44,CH	DSNAME OF LAST FILE ON TAPE		98928000
MVACCINF,*,40,CH	ACCOUNTING INFORMATION		98964000
MVDESC,*,30,CH	USER DESCRIPTION		99000000
MVUSEFLD,=,30,CH	USER DESCRIPTION		99036000
SKIP,2	RESERVED		99072000
MVAUTIDS,*,96,CH	AUTHORISED USER IDS AREA		99108000
* MVAUTIDS IS 12 8-BYTE SLOTS, CONTAINING UP TO 12 USER IDS			99144000
MVAUTIDS_01,=,8,CH	USER ID - 01		99180000
MVAUTIDS_02,*,8,CH	USER ID - 02		99216000
MVAUTIDS_03,*,8,CH	USER ID - 03		99252000
MVAUTIDS_04,*,8,CH	USER ID - 04		99288000
MVAUTIDS_05,*,8,CH	USER ID - 05		99324000
MVAUTIDS_06,*,8,CH	USER ID - 06		99360000
MVAUTIDS_07,*,8,CH	USER ID - 07		99396000
MVAUTIDS_08,*,8,CH	USER ID - 08		99432000
MVAUTIDS_09,*,8,CH	USER ID - 09		99468000
MVAUTIDS_10,*,8,CH	USER ID - 10		99504000
MVAUTIDS_11,*,8,CH	USER ID - 11		99540000
MVAUTIDS_12,*,8,CH	USER ID - 12		99576000
*****			99612000
* END OF VOLUME INFORMATION		*	99648000
*****			99684000
MVRCEND,*	END OF MVRC		99720000
*****			99756000
* END OF RMM MVREC		*	99792000
*****			99828000

EDGSMFSY

Appendix B. DFSMSrmm Mapping Macros

Rule: Do not use any DFSMSrmm macros, other than those identified in this document as programming interfaces.

DFSMSrmm provides the macros that are identified in this appendix as programming interfaces for customers.

- Report Extract Data Set Mapping Macros in SYS1.MACLIB.

You use the extract data set as input to the DFSMSrmm utility EDGRPTD to create reports.

The extract data set contains information extracted from the DFSMSrmm control data set. The extract data set records contain all major key fields so you can select fields and sort them for reports. Variable length fields are expanded to maximum length and redundant control information is removed to allow for simple reporting.

The DATEFORM parameter you use in the EDGHSKP parameter list, or the default set by DATEFORM in EDGRMMxx determines the format of all data fields.

“Extract Data Set Data Set Name Record: EDGRDEXT” on page 206

“Extract Data Set Extended Data Set Name Record: EDGRXEXT” on page 226

“Extract Data Set Header Record: EDGRHEXT” on page 209

“Extract Data Set Vital Record Specification Record: EDGRKEXT” on page 210

“Extract Data Set Owner Record: EDGROEXT” on page 213

“Extract Data Set Software Product Record: EDGRPEXT” on page 215

“Extract Data Set Rack Record: EDGRREXT” on page 216

“Extract Data Set Volume Report Record: EDGRVEXT” on page 219

- SMF Records Mapping Macros in SYS1.MODGEN.

DFSMSrmm requires two record types to support audit and security needs. You specify the exact SMF record types in EDGRMMxx, using SMFAUD for auditing and SMFSEC for security records.

You can map the SMF audit record using a combination of mapping macros. EDGSMFAR maps header information in the SMF record; EDGSxREC macros map the data in the body of the records. EDGSMFSR maps the security record information.

“SMF Audit Record Header Information: EDGSMFAR” on page 235

“SMF Security Record Information: EDGSMFSR” on page 236

“SMF Action Record Information: EDGSAREC” on page 245

“SMF Data Set Information: EDGSDREC” on page 247

“SMF Vital Record Specification Information: EDGSKREC” on page 252

“SMF Owner Information: EDGSOREC” on page 255

“SMF Software Product Information: EDGSPREC” on page 258

“SMF Library Shelf Location Information: EDGSRREC” on page 260

“SMF Storage Location Shelf Location Information: EDGSSREC” on page 262

“SMF Volume Information: EDGSVREC” on page 264

General-use Programming Interface Mapping Macros

This section contains general-use programming interface and associated guidance information.

EDGRDEXT

Extract Data Set Data Set Name Record: EDGRDEXT

EDGRDEXT maps the data set name record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	RDEXT	
RDEXT: This macro maps the information produced for data set records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	RDTYPE	RECORD TYPE - C'D'
1	(1)	CHARACTER	3		RESERVED
4	(4)	CHARACTER	44	RDDSNAME	DATA SET NAME
Start of common fields: The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
48	(30)	CHARACTER	10	RDCRDATE	CREATE DATE of data set record
58	(3A)	CHARACTER	6	RDCRTIME	CREATE TIME (HHMMSS) of data set
64	(40)	CHARACTER	8	RDCRSID	CREATE SYSTEM ID of data set record
72	(48)	CHARACTER	10	RDLCDATE	LAST CHANGE DATE of data set record
82	(52)	CHARACTER	6	RDLCTIME	LAST CHANGE TIME (HHMMSS) of data set record
88	(58)	CHARACTER	8	RDLGUID	LAST CHANGE USER ID of data set record
96	(60)	CHARACTER	8	RDLCSID	LAST CHANGE SYSTEM ID of data set record
End of common fields					
104	(68)	CHARACTER	6	RDVOLSER	VOLUME SERIAL NUMBER
110	(6E)	CHARACTER	4		RESERVED WAS DSEQ
114	(72)	CHARACTER	4	RDUNITAD	CREATING DRIVE ADDRESS
118	(76)	CHARACTER	4	RDRECFM	RECORD FORMAT
122	(7A)	CHARACTER	4	RDVOLSEQ	VOLUME SEQUENCE NUMBER
126	(7E)	CHARACTER	6	RDLRECL	LOGICAL RECORD LENGTH
132	(84)	CHARACTER	6	RDBLKSZ	PHYSICAL BLOCK SIZE
138	(8A)	CHARACTER	8	RDBLKCNT	BLOCK COUNT
146	(92)	CHARACTER	8	RDOWNDSN	DATA SET OWNER
154	(9A)	CHARACTER	8	RDSECLEV	SECURITY LEVEL - SHORT
162	(A2)	CHARACTER	30	RDSECLNG	SECURITY LEVEL - LONG
192	(C0)	CHARACTER	1	RDCOMP	COMPACTION USED - Y/N
193	(C1)	CHARACTER	10	RDLRDDAT	DATE DATA SET LAST READ
203	(CB)	CHARACTER	10	RDLWTDAT	DATE DATA SET LAST WRITTEN
213	(D5)	CHARACTER	8	RDMCNAME	SMS MANAGEMENT CLASS
221	(DD)	CHARACTER	8	RDVRSVAL	VRS MANAGEMENT VALUE
229	(E5)	CHARACTER	8	RDSGNAME	SMS STORAGE GROUP NAME
237	(ED)	CHARACTER	8	RDSCNAME	SMS STORAGE CLASS NAME
245	(F5)	CHARACTER	8	RDDCNAME	SMS DATA CLASS NAME
253	(FD)	CHARACTER	8	RDCRTJBN	CREATING JOB NAME

Offsets						
Dec	Hex	Type	Len	Name(Dim)	Description	
261	(105)	CHARACTER	1	RDVRSSTYP	MATCHING VRS TYPE, ONE OF: D-DATASET, S-SMSMC, V-VRSMV, M-DATASET AND VRSMV C-DATASET AND SMSMC	
262	(106)	CHARACTER	44	RDVRSNAM	MATCHING VRS NAME	
306	(132)	CHARACTER	8	RDVRSJBN	MATCHING VRS JOB NAME MASK	
314	(13A)	CHARACTER	10	RDRETDAT	RETENTION DATE	
324	(144)	CHARACTER	8	RDSTEPNM	CREATING STEP NAME	
332	(14C)	CHARACTER	8	RDDDDNAME	CREATING DD NAME	
RDMDMVID: Is a unique token assigned to every volume and every data set in a multi-volume set.						
340	(154)	CHARACTER	8	RDMDMVID	MULTI-DSET MULTI-VOL ID	
Data set size: This is calculated by multiplying the blocksize by the number of blocks.						
348	(15C)	CHARACTER	10	RDDSSIZE	APPROX. SIZE OF FILE KBYTES	
358	(166)	CHARACTER	1	RDABEND	DSET CLOSED BY ABEND Y/N	
RDCAT: Set to 'Y' when opened after allocation determines VOLSER by reference to the catalog. Once set to 'Y' it is never changed.						
359	(167)	CHARACTER	1	RDCAT	DSET USED VIA CATALOG Y/N	
360	(168)	CHARACTER	1	RDVRSR	RETAINED BY VRS Y/N	
361	(169)	CHARACTER	3	RDRSVMW1	RESERVED	
364	(16C)	CHARACTER	4		RESERVED WAS LABEL NUMBER	
Primary VRS subchain name: This is the retaining VRS in the matching primary VRS chain. It is set only if retained by a NAME VRS subchain in the primary VRS.						
368	(170)	CHARACTER	8	RDVRS SCH	Primary VRS subchain NAME	
376	(178)	CHARACTER	10	RDVRSXDS	Primary VRS subchain start date	
Retaining Secondary VRS name: Matching vrs name and job name are included where a secondary VRS also matches. The retaining VRS subchain NAME in this matching VRS is set if it is used to retain the data set.						
386	(182)	CHARACTER	8	RD2VNME	Secondary VRS name mask	
394	(18A)	CHARACTER	8	RD2VJBN	Secondary VRS jobname mask	
402	(192)	CHARACTER	8	RD2VSCH	Secondary VRS subchain NAME	
410	(19A)	CHARACTER	10	RD2VXDS	Secondary VRS subchain startdate	
420	(1A4)	CHARACTER	10	RDTOTAL_BLKCNT	Total block count across this and previous volumes	
430	(1AE)	CHARACTER	3	RDPERCENT	Percentage of volume used by data set	
433	(1B1)	CHARACTER	8	RDCPGM	Creating program name	
441	(1B9)	CHARACTER	8	RDLPGM	Last used program name	
449	(1C1)	CHARACTER	8	RDLJOB	Last use job name	
457	(1C9)	CHARACTER	8	RDLSTEP	Last use step name	
465	(1D1)	CHARACTER	8	RDLDDNM	Last use DD name	
473	(1D9)	CHARACTER	4	RDLDEVN	Last use device number	
477	(1DD)	CHARACTER	5	RDDSNSEQ	Data set sequence number new	
482	(1E2)	CHARACTER	5	RDLABNO	Label number label=(xx,II) new	
END OF REPORT EXTRACT DATA SET NAME RECORD						
487	(1E7)	CHARACTER	1	RDRCEM(0)	END OF RDEXT	

EDGRDEXT

Offsets		Hex	Type	Len	Name(Dim)	Description
Dec						
487		(1E7)		0	RDRCLNG	"RDRCEXT-RDEXT" MAX LENGTH OF RDEXT

EDGRDEXT Cross Reference

Name	Offset	Hex Tag	Level
RDABEND	166		2
RDBLKCNT	8A		2
RDBLKSZ	84		2
RDCAT	167		2
RDCOMP	C0		2
RDCPGM	1B1		2
RDCRDATE	30		2
RDCRSID	40		2
RDCRTIME	3A		2
RDCRTJBN	FD		2
RDDCNAME	F5		2
RDDDNAME	14C		2
RDDSNAME	4		2
RDDSSEQ	1DD		2
RDDSSIZE	15C		2
RDEXT	0		1
RDLABNO	1E2		2
RDLCDATE	48		2
RDLCSID	60		2
RDLCTIME	52		2
RDLUID	58		2
RDLDDNM	1D1		2
RDLDEVN	1D9		2
RDLJOB	1C1		2
RDLPGM	1B9		2
RDLRDDAT	C1		2
RDLRECL	7E		2
RDLSTEP	1C9		2
RDLWTDAT	CB		2
RDMCNAME	D5		2
RDMDMVID	154		2
RDOWNDSN	92		2
RDPERCENT	1AE		2
RDRCEXT	1E7		2
RDRCLNG	1E7	1E7	2
RDRECFM	76		2
RDRETDAT	13A		2
RDRSVMW1	169		2
RDSCNAME	ED		2
RDSECLEV	9A		2
RDSECLNG	A2		2
RDSGNAME	E5		2
RDSTEPNM	144		2
RDTOTAL_BLKCNT	1A4		2
RDTYPE	0		2
RDUNITAD	72		2
RDVOLSEQ	7A		2

Name	Offset	Hex Tag	Level
RDVOLSER	68		2
RDVRSJBN	132		2
RDVRSNAM	106		2
RDVRSR	168		2
RDVRS SCH	170		2
RDVRS TYP	105		2
RDVRS VAL	DD		2
RDVRS XDS	178		2
RD2VJBN	18A		2
RD2VNME	182		2
RD2VSCH	192		2
RD2VXDS	19A		2

Extract Data Set Header Record: EDGRHEXT

EDGRHEXT maps the header record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	RHEXT	
RHEXT: This macro maps the information in the extract file header records. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	RHTYPE	RECORD TYPE - C'H'
		11.. 1...		RHTYPEID	"C'H" Header record
1	(1)	CHARACTER	47		RESERVED
Start of common fields: The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
48	(30)	CHARACTER	10	RHCRDATE	CREATE DATE of header record
58	(3A)	CHARACTER	6	RHCRTIME	CREATE TIME HHMMSS of header record
64	(40)	CHARACTER	8	RHCRSID	CREATE SYSTEM ID of header record
72	(48)	CHARACTER	10		RESERVED
82	(52)	CHARACTER	6		RESERVED
88	(58)	CHARACTER	8		RESERVED
96	(60)	CHARACTER	8		RESERVED
End of common fields					
104	(68)	CHARACTER	1	RHDATEFORM	Format of all dates in the extract file
		.1..		RHDATEFORM_NOTSET	"C' "
		11.. .1.1		RHDATEFORM_EUROPEAN	"C'E"
		11.. ...1		RHDATEFORM_AMERICAN	"C'A"
		11.. 1..1		RHDATEFORM_ISO	"C'I"
		11.1 ...1		RHDATEFORM_JULIAN	"C'J"
105	(69)	CHARACTER	1	RHEXTENDEDDBIN	Extended bin enabled Y/N
106	(6A)	CHARACTER	99		reserved
END OF REPORT EXTRACT HEADER RECORD					
205	(CD)	CHARACTER	1	RHRCEND(0)	END OF RHEXT

EDGRHEXT

Offsets			Len	Name(Dim)	Description
Dec	Hex	Type			
		11.. 11.1		RHRCLNG	"RHRCEND-RHEXT" MAX LENGTH OF RHEXT

EDGRHEXT Constants

Len	Type	Value	Name	Description
1	CHARACTER	H	RHTYPEID	
1	CHARACTER		RHDATEFORM_NOTSET	
1	CHARACTER	E	RHDATEFORM_EUROPEAN	
1	CHARACTER	A	RHDATEFORM_AMERICAN	
1	CHARACTER	I	RHDATEFORM_ISO	
1	CHARACTER	J	RHDATEFORM_JULIAN	

EDGRHEXT Cross Reference

Name	Offset	Hex Tag	Level
RHCRDATE	30		2
RHCRSID	40		2
RHCRTIME	3A		2
RHDATEFORM	68		2
RHDATEFORM_AMERICAN	68	C1	2
RHDATEFORM_EUROPEAN	68	C5	2
RHDATEFORM_ISO	68	C9	2
RHDATEFORM_JULIAN	68	D1	2
RHDATEFORM_NOTSET	68	40	2
RHEXT	0		1
RHEXTENDED BIN	69		2
RHRCEND	CD		2
RHRCLNG	CD	CD	2
RHTYPE	0		2
RHTYPEID	0	C8	2

Extract Data Set Vital Record Specification Record: EDGRKEXT

EDGRKEXT maps the vital record specification record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets			Len	Name (Dim)	Description
Dec	Hex	Type			
0	(0)	STRUCTURE		RKEXT	
RKEXT: This macro maps the information produced for VRS records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	RKTYPE	RECORD TYPE - 'C'K'
1	(1)	CHARACTER	1	RKTYPE2	VRS TYPE. ONE OF:
		111. .1.1		RKTYPVOL	"C'V'" VOLUME VRS C'V'
		11.. .1..		RKTYPDSN	"C'D'" DATA SET VRS C'D'
		11.1 .1.1		RKTYPNAM	"C'N'" NAME VRS C'N'
2	(2)	CHARACTER	1		RESERVED
3	(3)	CHARACTER	44	RKDSNAME	DATA SET NAME MASK

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
3	(3)	CHARACTER	8	RKNAME	VRS NAME
3	(3)	CHARACTER	6	RKVOLSER	VOLUME SERIAL MASK
47	(2F)	CHARACTER	1	RKGENKEY	DATA SET/VOLUME MASK CONTAINS GENERIC CHARACTERS Y-YES, N-NO
Start of common fields:					
The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
48	(30)	CHARACTER	10	RKCRDATE	CREATE DATE of VRS record
58	(3A)	CHARACTER	6	RKCRTIME	CREATE TIME (HHMMSS) of VRS record
64	(40)	CHARACTER	8	RKCRSID	CREATE SYSTEM ID of VRS record
72	(48)	CHARACTER	10	RKLCDATE	LAST CHANGE DATE of VRS record
82	(52)	CHARACTER	6	RKLCTIME	LAST CHANGE TIME (HHMMSS) of VRS record
88	(58)	CHARACTER	8	RKLCUID	LAST CHANGE USER ID of VRS record
96	(60)	CHARACTER	8	RKLCSID	LAST CHANGE SYSTEM ID of VRS record
End of common fields					
104	(68)	CHARACTER	8	RKCRJBN	JOBNAME MASK
112	(70)	CHARACTER	1	RKRETNC	RETAIN BASED ON NUMBER OF CYCLES Y/N
113	(71)	CHARACTER	1	RKRETND	RETAIN BASED ON NUMBER OF ELAPSED DAYS Y/N
114	(72)	CHARACTER	1	RKRETNR	RETAIN BASED ON NUMBER OF DAYS UNREFERENCED Y/N
115	(73)	CHARACTER	1	RKRETNW	RETAIN ONLY WHILE DATA SET IS CATALOGED Y/N
116	(74)	CHARACTER	1	RKRETNX	RETAIN UNTIL EXPIRED Y/N
117	(75)	CHARACTER	1	RKRETNXD	RETAIN BASED ON EXTRA DAYS SINCE VRS MATCHED Y/N
118	(76)	CHARACTER	1	RKRETNCD	RETAIN BASED ON BYDAYSCYCLE ALL COPIES ON 1 DAY ARE TREATED AS 1 CYCLE Y/N
119	(77)	CHARACTER	1	RKRETAND	RETENTION MUST BE ANDED WITH THE NEXT VRS IN THE CHAIN Y/N
120	(78)	CHARACTER	5		RESERVED
125	(7D)	CHARACTER	1	RKDSNG	DATA SET NAME MASK IS FOR A GDG: Y=GDG, P=PSEUDO-GDG ,N=NOGDG
126	(7E)	CHARACTER	1	RKLOCTYP	LOCATION TYPE. ONE OF: A-AUTO, M-MANUAL, S-STORE OR BLANK
127	(7F)	CHARACTER	8	RKLOC	NAME OF LOCATION TO BE STORED ONE OF: HOME, STORAGE LOCATION, OR SMS-DEFINED LIBRARY NAME
135	(87)	CHARACTER	8	RKNEXT	NAME OF NEXT VRS IN THE CHAIN

EDGRKEXT

Offsets						
Dec	Hex	Type	Len	Name (Dim)	Description	
143	(8F)	CHARACTER	5	RKCOUNT	VITAL RECORD COUNT (NUMBER OF CYCLES OR ELAPSED DAYS OR VOLUMES TO BE KEPT IN TOTAL)	
148	(94)	CHARACTER	5	RKSTNUM	STORE KEEP NUMBER (NUMBER OF CYCLES OR DAYS OR VOLUMES TO BE KEPT IN STORE)	
153	(99)	CHARACTER	5	RKDELAY	NUMBER OF ELAPSED DAYS DELAY BEFORE BEING SELECTED FOR THE FIRST LOCATION	
158	(9E)	CHARACTER	8	RKOWNER	VITAL RECORD OWNER	
166	(A6)	CHARACTER	10	RKDELDAT	DATE THE VRS IS TO BE DELETED BY RMM	
176	(B0)	CHARACTER	30	RKDESC	DESCRIPTION	
206	(CE)	CHARACTER	8	RKRELOPT(0)	VRS RELEASE OPTIONS	
206	(CE)	CHARACTER	1	RKRELIXD	IGNORE EXPDT Y/N	
207	(CF)	CHARACTER	1	RKRELSI	SCRATCH IMMEDIATE Y/N	
208	(D0)	CHARACTER	6		RESERVED	
END OF REPORT EXTRACT VRS RECORD						
214	(D6)	CHARACTER	1	RKRCEND(0)	END OF RKEXT	
		11.. 111.		RKRCLNG	"RKRCEM-RKEXT" MAX LENGTH OF RKEXT	

Constants

Len	Type	Value	Name	Description
1	CHARACTER	V	RKTYPVOL	VOLUME VRS
1	CHARACTER	D	RKTYPDSN	DATAASET VRS
1	CHARACTER	N	RKTYPNAM	NAME VRS
2	DECIMAL	214	RKRCLNG	CB LENGTH

EDGRKEXT Cross Reference

Name	Offset	Hex Tag	Level
RKCOUNT	8F		2
RKCRDATE	30		2
RKCRSID	40		2
RKCRTIME	3A		2
RKCRTJBN	68		2
RKDELAY	99		2
RKDELDAT	A6		2
RKDESC	B0		2
RKDSNAME	3		2
RKDSNG	7D		2
RKGENKEY	2F		2
RKLCDATE	48		2
RKLCSID	60		2
RKLCTIME	52		2
RKLUID	58		2
RKLOC	7F		2

EDGRKEXT

Name	Offset	Hex Tag	Level
RKLOCTYP	7E		2
RKNAME	3		2
RKNEXT	87		2
RKOWNER	9E		2
RKRCEND	D6		2
RKRCLNG	D6	D6	2
RKRELIXD	CE		2
RKRELOPT	CE		2
RKRELSI	CF		2
RKRETAND	77		2
RKRETNC	70		2
RKRETNCD	76		2
RKRETND	71		2
RKRETNR	72		2
RKRETNW	73		2
RKRETNX	74		2
RKRETNXD	75		2
RKSTNUM	94		2
RKTYPDSN	1	C4	2
RKTYPE	0		2
RKTYPE2	1		2
RKTYPNAM	1	D5	2
RKTYPVOL	1	E5	2
RKVOLSER	3		2

Extract Data Set Owner Record: EDGROEXT

EDGROEXT maps the owner record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		ROEXT	
ROEXT: This macro maps the information produced for owner records in the RMM report extract file.					
In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	ROTYPE	RECORD TYPE - 'C'O'
1	(1)	CHARACTER	3		RESERVED
4	(4)	CHARACTER	8	ROOWNER	OWNER ID
12	(C)	CHARACTER	36		RESERVED SO CRDATE IN SAMEPLACE

Start of common fields:

The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.

48	(30)	CHARACTER	10	ROCRDATE	CREATE DATE of owner record
58	(3A)	CHARACTER	6	ROCRTIME	CREATE TIME (HHMMSS) of owner record
64	(40)	CHARACTER	8	ROCRSID	CREATE SYSTEM ID of owner record
72	(48)	CHARACTER	10	ROLCDATE	LAST CHANGE DATE of owner record

EDGROEXT

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
82	(52)	CHARACTER	6	ROLCTIME	LAST CHANGE TIME (HHMMSS) of owner record
88	(58)	CHARACTER	8	ROLGUID	LAST CHANGE USER ID of owner record
96	(60)	CHARACTER	8	ROLCSID	LAST CHANGE SYSTEM ID of owner record
End of common fields					
104	(68)	CHARACTER	20	ROOWNSUR	OWNER LAST NAME
124	(7C)	CHARACTER	20	ROOWNFST	OWNER FIRST NAME
144	(90)	CHARACTER	40	ROOWNDEP	OWNER DEPARTMENT
184	(B8)	CHARACTER	40	ROOWNAD1	OWNER ADDRESS LINE 1
224	(E0)	CHARACTER	40	ROOWNAD2	OWNER ADDRESS LINE 2
264	(108)	CHARACTER	40	ROOWNAD3	OWNER ADDRESS LINE 3
304	(130)	CHARACTER	8	ROOWNTIN	OWNER INTERNAL TELEPHONE NUMBER
312	(138)	CHARACTER	20	ROOWNTEX	OWNER EXTERNAL TELEPHONE NUMBER
332	(14C)	CHARACTER	8	ROOWNUID	OWNER ELECTRONIC USERID
340	(154)	CHARACTER	8	ROOWNNOD	OWNER ELECTRONIC NODE NAME
348	(15C)	CHARACTER	6	ROOWNVOL	TOTAL NUMBER OF OWNED VOLUMES
END OF REPORT EXTRACT OWNER RECORD					
354	(162)	CHARACTER	1	RORCEND(0)	END OF ROEXT
354	(162)			RORCLNG	"RORCEND-ROEXT" MAX LENGTH OF ROEXT

EDGROEXT Cross Reference

Name	Offset	Hex Tag	Level
ROCRDATE	30		2
ROCRSID	40		2
ROCRTIME	3A		2
ROLCDATE	48		2
ROLCSID	60		2
ROLCTIME	52		2
ROLGUID	58		2
ROOWNAD1	B8		2
ROOWNAD2	E0		2
ROOWNAD3	108		2
ROOWNDEP	90		2
ROOWNER	4		2
ROOWNFST	7C		2
ROOWNNOD	154		2
ROOWNSUR	68		2
ROOWNTEX	138		2
ROOWNTIN	130		2
ROOWNUID	14C		2
ROOWNVOL	15C		2
RORCEND	162		2
RORCLNG	162	162	2
ROTYPE	0		2

Extract Data Set Software Product Record: EDGRPEXT

EDGRPEXT maps the software product record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		RPEXT	
RPEXT: This macro maps the information produced for product records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	RPTYPE	RECORD TYPE - C'P'
1	(1)	CHARACTER	3		RESERVED
4	(4)	CHARACTER	8	RPPPNUM	PRODUCT NUMBER (NNNN-CCC)
12	(C)	CHARACTER	6	RPVER	VERSION/RELEASE/MOD NUMBER (vvrmm) where vv - version, rr - release, mm - modification level
18	(12)	CHARACTER	30		RESERVED SO CRDATE IN SAMEPLACE
Start of common fields: The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
48	(30)	CHARACTER	10	RPCRDATE	CREATE DATE of product record
58	(3A)	CHARACTER	6	RPCRTIME	CREATE TIME (HHMMSS) of product record
64	(40)	CHARACTER	8	RPCRSID	CREATE SYSTEM ID of product record
72	(48)	CHARACTER	10	RPLCDATE	LAST CHANGE DATE of product record
82	(52)	CHARACTER	6	RPLCTIME	LAST CHANGE TIME (HHMMSS) of product record
88	(58)	CHARACTER	8	RPLCUID	LAST CHANGE USER ID of product record
96	(60)	CHARACTER	8	RPLCSID	LAST CHANGE SYSTEM ID of product record
End of common fields					
104	(68)	CHARACTER	8	RPPPOWN	PRODUCT OWNER ID
112	(70)	CHARACTER	30	RPPPNAME	PRODUCT NAME
142	(8E)	CHARACTER	30	RPPPDESC	PRODUCT DESCRIPTION
172	(AC)	CHARACTER	4	RPVOLNO	NUMBER OF PRODUCT VOLUMES
END OF REPORT EXTRACT PRODUCT RECORD					
176	(B0)	CHARACTER	1	RPRCEND(0) RPRCLNG	END OF RPEXT "RPRCEND-RPEXT" MAX LENGTH OF RPEXT

EDGRPEXT Cross Reference

Name	Offset	Hex Tag	Level
RPCRDATE	30		2
RPCRSID	40		2
RPCRTIME	3A		2

EDGRPEXT

Name	Offset	Hex Tag	Level
RPLCDATE	48		2
RPLCSID	60		2
RPLCTIME	52		2
RPLCUID	58		2
RPPPDESC	8E		2
RPPPNAME	70		2
RPPPNUM	4		2
RPPPOWN	68		2
RPRCEND	B0		2
RPRCLNG	B0	B0	2
RPTYPE	0		2
RPVER	C		2
RPVOLNO	AC		2

Extract Data Set Rack Record: EDGRREXT

EDGRREXT maps the rack record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		RREXT	
<p>RREXT: This macro maps the information produced for rack number records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.</p>					
0	(0)	CHARACTER	1	RRTYPE	RECORD TYPE - 'C'R'
1	(1)	CHARACTER	1	RRTYPE2	RACK RECORD ID: ONE OF:
		11.. .1.1		RRTYPEE	"C'E" E - EMPTY RACK
		11.. .11.		RRTYPEF	"C'F" F - FREE/SCRATCH RACK
		111. .1..		RRTYPEU	"C'U" U - IN USE RACK
2	(2)	CHARACTER	2		RESERVED
4	(4)	CHARACTER	6	RRRACK	RACK NUMBER
10	(A)	CHARACTER	8	RRNAME	MEDIA NAME
		.... 1.1.		RRUNIT	"RRNAME,8" Old name for RRNAME field
18	(12)	CHARACTER	30		RESERVED SO CRDATE IN SAMEPLACE

Start of common fields:

The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.

48	(30)	CHARACTER	10	RRCRDATE	CREATE DATE of rack record
58	(3A)	CHARACTER	6	RRCRTIME	CREATE TIME (HHMMSS) of rack record
64	(40)	CHARACTER	8	RRCRSID	CREATE SYSTEM ID of rack record
72	(48)	CHARACTER	10	RRLCDATE	LAST CHANGE DATE of rack record
82	(52)	CHARACTER	6	RRLCTIME	LAST CHANGE TIME (HHMMSS) of rack record
88	(58)	CHARACTER	8	RRLCUID	LAST CHANGE USER ID of rack record

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
96	(60)	CHARACTER	8	RRLCSID	LAST CHANGE SYSTEM ID of rack record
End of common fields					
104	(68)	CHARACTER	6	RRVOLSER	ASSIGNED VOLUME SERIAL NUMBER
END OF REPORT EXTRACT RACK NUMBER RECORD					
110	(6E)	CHARACTER .11. 111.	1	RRRCEND(0) RRRCLNG	END OF RREXT "RRRCEND-RREXT" MAX LENGTH OF RREXT

EDGRREXT Cross Reference

Name	Offset	Hex Tag	Level
RRCRDATE	30		2
RRCRSID	40		2
RRCRTIME	3A		2
RRLCDATE	48		2
RRLCSID	60		2
RRLCTIME	52		2
RRLCUID	58		2
RRNAME	A		2
RRRACK	4		2
RRRCEND	6E		2
RRRCLNG	6E	6E	2
RRTYPE	0		2
RRTYPEE	1	C5	2
RRTYPEF	1	C6	2
RRTYPEU	1	E4	2
RRTYPE2	1		2
RRUNIT	A	A	2
RRVOLSER	68		2

Extract Data Set Storage Location Shelf Location Record EDGRSEXT

EDGRSEXT maps the storage location bin record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	RSEXT	
RSEXT: This macro maps the information produced for bin number records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.					
0	(0)	CHARACTER	1	RSTYPE	RECORD TYPE C'S'
1	(1)	CHARACTER	1	RSTYPE2	BIN RECORD ID: ONE OF:
				RSTYPER	"C'E" E - EMPTY BIN
				RSTYPES	"C'U" U - ASSIGNED BIN
2	(2)	CHARACTER	8	RSRMSTID	STORAGE LOCATION NAME
10	(A)	CHARACTER	1		RESERVED
11	(B)	CHARACTER	6	RSBINNO	BIN NUMBER

EDGRSEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
17	(11)	CHARACTER	8	RSBMEDN	BIN MEDIA NAME
25	(19)	CHARACTER	23		RESERVED SO CRDATE IN SAMEPLACE
Start of common fields:					
The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
48	(30)	CHARACTER	10	RSCRDATE	CREATE DATE of bin record
58	(3A)	CHARACTER	6	RSCRTIME	CREATE TIME (HHMMSS) of bin record
64	(40)	CHARACTER	8	RSCRSID	CREATE SYSTEM ID of bin record
72	(48)	CHARACTER	10	RSLCDATE	LAST CHANGE DATE of bin record
82	(52)	CHARACTER	6	RSLCTIME	LAST CHANGE TIME (HHMMSS) of bin record
88	(58)	CHARACTER	8	RSLCUID	LAST CHANGE USER ID of bin record
96	(60)	CHARACTER	8	RSLCSID	LAST CHANGE SYSTEM ID of bin record
End of common fields					
104	(68)	CHARACTER	6	RSVOLSER	Current volume
110	(6E)	CHARACTER	6	RSMOVINGINVOL	Moving-in volume
116	(74)	CHARACTER	6	RSMOVINGOUTVOL	Moving-out volume
122	(7A)	CHARACTER	6	RSOLDVOL	Old volume
END OF REPORT EXTRACT STORAGE LOCATION BIN RECORD					
128	(80)	CHARACTER	1	RSRCEND(0)	END OF RSEXT
	1... ..			RSRCLNG	"RSRCEND-RSEXT" MAX LENGTH OF RSEXT

EDGRSEXT Cross Reference

Name	Offset	Hex Tag	Level
RSBINNO	B		2
RSBMEDN	11		2
RSCRDATE	30		2
RSCRSID	40		2
RSCRTIME	3A		2
RSEXT	0		1
RSLCDATE	48		2
RSLCSID	60		2
RSLCTIME	52		2
RSLCUID	58		2
RSMOVINGINVOL	6E		2
RSMOVINGOUTVOL	74		2
RSOLDVOL	7A		2
RSRCEND	80		2
RSRCLNG	80	80	2
RSRMSTID	2		2
RSTYPE	0		2
RSTYPER	1	C5	2
RSTYPES	1	E4	2
RSTYPE2	1		2
RSVOLSER	68		2

Extract Data Set Volume Report Record: EDGRVEXT

EDGRVEXT maps the volume record in the DFSMSrmm extract data set. See "Using the Extract Data Set" on page 42 for more information about the DFSMSrmm extract data set.

Offsets						
Dec	Hex	Type	Len	Name(Dim)	Description	
0	(0)	STRUCTURE	0	RVEXT		
RVEXT: This macro maps the information produced for volume records in the RMM report extract file. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.						
0	(0)	CHARACTER	1	RVTYPE	RECORD TYPE - C'V'	
1	(1)	CHARACTER	3		RESERVED	
4	(4)	CHARACTER	6	RVVOLSER	VOLUME SERIAL NUMBER	
10	(A)	CHARACTER	6	RVPVOL	PREVIOUS VOLUME IN SEQUENCE	
16	(10)	CHARACTER	6	RVNVOL	NEXT VOLUME IN SEQUENCE	
22	(16)	CHARACTER	6		RESERVED	
RVMDMVID: Is a unique token assigned to every volume and every data set in a multi-volume set.						
28	(1C)	CHARACTER	8	RVMDMVID	MULTI-DSET MULT-VOL ID	
36	(24)	CHARACTER	12		RESERVED SO CRDATE SAMEPLACE	
Start of common fields: The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.						
48	(30)	CHARACTER	10	RVCRDATE	CREATE DATE of volume record	
58	(3A)	CHARACTER	6	RVCRTIME	CREATE TIME HHMMSS of volume record	
64	(40)	CHARACTER	8	RVCRSID	CREATE SYSTEM ID of volume record	
72	(48)	CHARACTER	10	RVLCDATE	LAST CHANGE DATE of volume record	
82	(52)	CHARACTER	6	RVLC TIME	LAST CHANGE TIME HHMMSS of volume record	
88	(58)	CHARACTER	8	RVLCUID	LAST CHANGE USER ID of volume record	
96	(60)	CHARACTER	8	RVLC SID	LAST CHANGE SYSTEM ID of volume record	
End of common fields						
104	(68)	CHARACTER	10	RVEXPDTO	EXPIRATION DATE - original	
114	(72)	CHARACTER	10	RVEXPDT	EXPIRATION DATE - current	
124	(7C)	CHARACTER	4	RV DEN	RECORDING DENSITY	
128	(80)	CHARACTER	1	RVCOMP	COMPACTION USED - Y/N	
129	(81)	CHARACTER	4		RESERVED WAS NO DSN ON VOL	
133	(85)	CHARACTER	10	RV TUSE	TAPE USAGE IN KBYTES	
143	(8F)	CHARACTER	4	RV USE	VOLUME USE COUNT	
147	(93)	CHARACTER	4		RESERVED WAS LABEL NO OF 1 FILE	

EDGRVEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
151	(97)	CHARACTER	8	RVSTORID	CURRENT LOCATION NAME: ONE OF: SHELF, LOCAL, REMOTE, DISTANT INSTALLATION-DEFINED STORE, OR SMS-DEFINED LIBRARY NAME
159	(9F)	CHARACTER	8	RVDEST	DESTINATION NAME: ONE OF: SHELF, LOCAL, REMOTE, DISTANT INSTALLATION-DEFINED STORE, OR SMS-DEFINED LIBRARY NAME

Bin Numbers: If a volume is not moving (RVTRANS=N), and is in a storage location, RVSTBIN contains the current bin number and RVOBIN the bin number in the previous location.

If a volume is moving (RVTRANS=Y), and moving to a storage location, RVSTBIN contains the target bin number and RVOBIN the bin number in the source location.

167	(A7)	CHARACTER	6	RVSTBIN	BIN NUMBER
173	(AD)	CHARACTER	6	RVOBIN	PREVIOUS BIN NUMBER
179	(B3)	CHARACTER	10	RVSTDATE	MOVEMENT TRACKING DATE
189	(BD)	CHARACTER	10	RVRETDAT	RETENTION DATE CALCULATED BY VRS PROCESSING
199	(C7)	CHARACTER	8	RVLONLOC	LOAN LOCATION
207	(CF)	CHARACTER	8	RVOLNLOC	PREVIOUS LOAN LOCATION
215	(D7)	CHARACTER	10	RVLRDDAT	DATE VOLUME LAST READ
225	(E1)	CHARACTER	10	RVLWTDAT	DATE VOLUME LAST WRITTEN

Assigned date and time:

These fields are set each time a volume changes either from or to scratch status.

235	(EB)	CHARACTER	10	RVASDATE	ASSIGNED DATE
245	(F5)	CHARACTER	6	RVASTIME	ASSIGNED TIME HHMMSS
251	(FB)	CHARACTER	8	RVOWNID	VOLUME OWNER USERID
259	(103)	CHARACTER	8	RVCROID	CREATING USERID
267	(10B)	CHARACTER	8	RVCJOB	CREATING JOBNAME
275	(113)	CHARACTER	8	RVSECLEV	SECURITY LEVEL - SHORT
283	(11B)	CHARACTER	30	RVSECLNG	SECURITY LEVEL - LONG
313	(139)	CHARACTER	4	RVVOLSEQ	VOLUME SEQUENCE NUMBER
317	(13D)	CHARACTER	8	RVSTATUS	VOLUME STATUS One of: MASTER USER SCRATCH INIT ENTRY
325	(145)	CHARACTER	1	RVPENDRS	VOLUME PENDING RELEASE - Y/N
326	(146)	CHARACTER	1	RVVRS	VOLUME RETAINED BY VRS - Y/N
327	(147)	CHARACTER	1	RVLOAN	VOLUME ON LOAN - Y/N
328	(148)	CHARACTER	1	RVOPEN	VOLUME IS OPENED - Y/N
329	(149)	CHARACTER	1	RVOCER	VOLUME RECORDED BY O/C/EOV - Y/N
330	(14A)	CHARACTER	1	RVDEFRET	PARMLIB DEFAULT RETENTION USED TO GENERATE THE VOLUME EXPDT - Y/N
331	(14B)	CHARACTER	1	RVPTAPE	PROGRAM PRODUCT TAPE - Y/N

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
Labels: The RVLABEL field provides information about what label types may be written on the volume. If BLP output has been used, the volume may no longer match this information. Any BLP output beyond file 1 on a volume is not recorded by RMM.					
332	(14C)	CHARACTER	3	RVLABEL	LABEL TYPE SL/AL/NL/SUL/AUL
335	(14F)	CHARACTER	1	RVBLP	VOLUME LAST WRITTEN BLP Y/N
Release Actions: The following 5 fields list the actions to be set for the volume when it is released. These are not the current actions. See RSACTION for the pending actions.					
336	(150)	CHARACTER	8	RVRETS	RETURN ACTION - OWNER/SCRATCH
344	(158)	CHARACTER	1	RVREPL	REPLACE ON RELEASE - Y/N
345	(159)	CHARACTER	1	RVINIT	REINITIALISE - Y/N
346	(15A)	CHARACTER	1	RVERASE	SECURITY ERASE - Y/N
347	(15B)	CHARACTER	1	RVNTFY	NOTIFY OWNER - Y/N
348	(15C)	CHARACTER	1	RVOWNAC	OWNER ACCESS - R/U/A
349	(15D)	CHARACTER	1	RVUSERAC	USER ACCESS - R/U
350	(15E)	CHARACTER	1	RVVMUSE	VM USE - Y/N
351	(15F)	CHARACTER	1	RVMVSUSE	MVS USE - Y/N
352	(160)	CHARACTER	8	RVNAME	MEDIA NAME
352	(160)		0	RVUNIT	"RVNAME,8" Old name for RVNAME field
360	(168)	CHARACTER	6	RVRACK	RACK NUMBER
366	(16E)	CHARACTER	4	RVTRERR	TEMPORARY READ ERRORS
370	(172)	CHARACTER	4	RVTWERR	TEMPORARY WRITE ERRORS
374	(176)	CHARACTER	4	RVPRERR	PERMANENT READ ERRORS
378	(17A)	CHARACTER	4	RVPWERR	PERMANENT WRITE ERRORS
Product Information: Includes number, release and feature code					
382	(17E)	CHARACTER	8	RVPPNUM	PROGRAM PRODUCT NUMBER
390	(186)	CHARACTER	6	RVVER	VERSION/RELEASE/MOD NUMBER
396	(18C)	CHARACTER	4	RVFEAT	FEATURE CODE
400	(190)	CHARACTER	40	RVACCINF	ACCOUNTING INFORMATION
440	(1B8)	CHARACTER	30	RVUSEFLD	USER DESCRIPTION
470	(1D6)	CHARACTER	3	RVACCLST	NUMBER OF ACCESS LIST ENTRIES
473	(1D9)	CHARACTER	96	RVAUTIDS	AUTHORISED USER IDS AREA
569	(239)	CHARACTER	8	RVHLOC	HOME LOCATION NAME
577	(241)	CHARACTER	1	RVTRANS	VOLUME IN TRANSIT. ONE OF: Y-YES N-NO
578	(242)	CHARACTER	1	RVLOCTYP	LOCATION TYPE. ONE OF: A-AUTO, M-MANUAL, S-STORE OR BLANK
579	(243)	CHARACTER	1	RVDESTYP	DESTINATION TYPE. ONE OF: A-AUTO, M-MANUAL, S-STORE, OR BLANK
580	(244)	CHARACTER	8	RVOLOC	THE PREVIOUS LOCATION NAME
588	(24C)	CHARACTER	8	RVSGNAME	STORAGE GROUP NAME
596	(254)	CHARACTER	8	RVMEDREC	VOLUME RECORDING FORMAT: ONE OF: *, 18TRACK, 36TRACK, 128TRACK 256TRACK or 384TRACK

EDGRVEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
604	(25C)	CHARACTER	8	RVMEDTY	VOLUME MEDIA TYPE: ONE OF: *, CST, ECCST, HPCT, EHPCT
EHPCT IS RESERVED FOR EXTENDED HIGH PERFORMANCE CARTRIDGE TAPE.					
612	(264)	CHARACTER	8	RVMEDCMP	COMPACTION TECHNIQUE: ONE OF: *, NONE, YES
620	(26C)	CHARACTER	8	RVMEDATR	SPECIAL ATTRIBUTES: ONE OF: NONE, RDCOMPAT
628	(274)	CHARACTER	44	RVDSNAM1	FIRST FILE DATA SET NAME
672	(2A0)	CHARACTER	1	RVMVMODE	MOVE MODE, ONE OF A-AUTOMOVE, M-MANUALMOVE
673	(2A1)	CHARACTER	1	RVDSNREC	DS RECORDING: Y=YES, N=NO
674	(2A2)	CHARACTER	2	RVALVERS	ANSI LABEL VERSIONS
674	(2A2)		0	RVALCUR	"RVALVERS,1" CURRENT LABEL VERSION ONE OF BLANK, 1,3, OR 4.
674	(2A2)		0	RVALREQ	"RVALVERS+1,1" REQUIRED LABEL VERSION ONE OF BLANK, 3, OR 4.
676	(2A4)	CHARACTER	8	RVBMEDN	BIN MEDIA NAME
684	(2AC)	CHARACTER	8	RVOBMEDN	PREVIOUS BIN MEDIA NAME
692	(2B4)	CHARACTER	8	RVNLOC	REQUIRED LOCATION NAME - AS DETERMINED BY VRS OR COMMAND
700	(2BC)	CHARACTER	4	RVLUDEV	LAST USED DRIVE
Pending Actions: The following fields list the actions required for the volume. See RVRETS for the actions set when the volume is released.					
704	(2C0)	CHARACTER	8	RVACTION(0)	PENDING ACTIONS
704	(2C0)	CHARACTER	1	RVACTSCR	RETURN TO SCRATCH Y/N
705	(2C1)	CHARACTER	1	RVACTREP	REPLACE VOLUME Y/N
706	(2C2)	CHARACTER	1	RVACTRET	RETURN TO OWNER Y/N
707	(2C3)	CHARACTER	1	RVACTINI	INITIALIZE Y/N
708	(2C4)	CHARACTER	1	RVACTERA	ERASE Y/N
709	(2C5)	CHARACTER	1	RVACTNOT	NOTIFY Y/N
710	(2C6)	CHARACTER	2	RVACTRSV	RESERVED
712	(2C8)	CHARACTER	1	RVABEND	DATA SET CLOSED BY ABEND: ONE OF: Y-YES OR N-NO
713	(2C9)	CHARACTER	1	RVHOMTYP	HOME LOCATION TYPE. ONE OF: A-AUTO, M-MANUAL, OR BLANK
714	(2CA)	CHARACTER	1	RVNEXTYP	NEXT LOCATION TYPE. ONE OF: A-AUTO, M-MANUAL, S-STORE, OR BLANK.
715	(2CB)	CHARACTER	1	RVVOLTYPE	VOLUME TYPE
		11.1 ..11		RVVOLTYPE_LOGICAL	"C'L',1,C'C' \$LGC"
		11.1 .111		RVVOLTYPE_PHYSICAL	"C'P',1,C'C'"
		111. ..1.		RVVOLTYPE_STACKED	"C'S',1,C'C'"
716	(2CC)	CHARACTER	8	RVVRSREL(0)	VRS RELEASE OPTIONS
716	(2CC)	CHARACTER	1	RVRELIXD	IGNORE EXPDT Y/N
717	(2CD)	CHARACTER	1	RVRELSI	SCRATCH IMMEDIATE Y/N
718	(2CE)	CHARACTER	6	RVRELRSV	RESERVED
724	(2D4)	CHARACTER	16	RVCONTNR	IN CONTAINER NAME
740	(2E4)	CHARACTER	4	RVRQPRTY	MOVEMENT PRIORITY
744	(2E8)	CHARACTER	10	RVCAPACITY	Volume capacity in MBytes
754	(2F2)	CHARACTER	1	RVRBYSET	VOLUME RETAINED BY SET

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
755	(2F3)	CHARACTER	1	RVSTACKVOL_ENABLED	STACKED VOLUME RECORD ENABLED AND SYNCHRONIZED.
756	(2F4)	CHARACTER	8	RVEXPTOKEN	UNIQUE VALUE CREATED AT START OF EXPORT TO A NEW STACKED VOLUME. ALL VOLUMES IN A STACKED VOLUME HAVE THE SAME UNIQUE VALU
764	(2FC)	CHARACTER	10	RVSTACKED_VOLCOUNT	COUNT OF VOLUMES STACKED ON A VOLUME. MAINTAINED IF STACKED VOLUME FULLY ENABLED.
774	(306)	CHARACTER	3	RVPERCENT	Volume percentage full
777	(309)	CHARACTER	5	RVDSNNO	NUMBER OF DATASETS ON VOLUME
782	(30E)	CHARACTER	5	RVLABNO1	LABEL NO OF FIRST FILE ON VOL
787	(313)	CHARACTER	8	RVDCRSID	FIRST FILE CREATE SYSTEM ID
795	(31B)	CHARACTER	1		Reserved
796	(31C)	CHARACTER	6	RVDESTBIN	Destination Bin Number
802	(322)	CHARACTER	8	RVDESTBINMEDIA	Destination Bin Media Number
810	(32A)	CHARACTER	6	RVVOL1	VOL1 label volser
END OF REPORT EXTRACT VOLUME RECORD					
816	(330)	CHARACTER	1	RVRCEND(0)	END OF RVEXT
816	(330)		0	RVRCCLNG	"RVRCEND-RVEXT" MAX LENGTH OF RVEXT

Constants

Len	Type	Value	Name	Description
1	CHARACTER	L	RVVOLTYPE_LOGICAL	
1	CHARACTER	P	RVVOLTYPE_PHYSICAL	
1	CHARACTER	S	RVVOLTYPE_STACKED	

EDGRVEXT Cross Reference

Name	Offset	Hex Tag	Level
RVABEND	2C8		2
RVACCINF	190		2
RVACCLST	1D6		2
RVACTERA	2C4		2
RVACTINI	2C3		2
RVACTION	2C0		2
RVACTNOT	2C5		2
RVACTREP	2C1		2
RVACTRET	2C2		2
RVACTRSV	2C6		2
RVACTSCR	2C0		2
RVALCUR	2A2	2A2	2
RVALREQ	2A2	2A3	2
RVALVERS	2A2		2
RVASDATE	EB		2
RVASTIME	F5		2

EDGRVEXT

Name	Offset	Hex Tag	Level
RVAUTIDS	1D9		2
RVBLP	14F		2
RVBMEDN	2A4		2
RVCAPACITY	2E8		2
RVCOMP	80		2
RVCONTNR	2D4		2
RVCRDATE	30		2
RVCRJOB	10B		2
RVCRSID	40		2
RVCRTIME	3A		2
RVCRUID	103		2
RVDCRSID	313		2
RVDEFRET	14A		2
RVDEN	7C		2
RVDEST	9F		2
RVDESTBIN	31C		2
RVDESTBINMEDIA	322		2
RVDESTYP	243		2
RVDSNAM1	274		2
RVDSNNO	309		2
RVDSNREC	2A1		2
RVERASE	15A		2
RVEXPDT	72		2
RVEXPDTO	68		2
RVEXPTOKEN	2F4		2
RVEXT	0		1
RVFEAT	18C		2
RVHLOC	239		2
RVHOMTYP	2C9		2
RVINIT	159		2
RVLABEL	14C		2
RVLABNO1	30E		2
RVLCDATE	48		2
RVLCSID	60		2
RVLCTIME	52		2
RVLUID	58		2
RVLOAN	147		2
RVLOCTYP	242		2
RVLONLOC	C7		2
RVLRDDAT	D7		2
RVLUDEV	2BC		2
RVLWTDAT	E1		2
RVMDMVID	1C		2
RVMEDATR	26C		2
RVMEDCMP	264		2
RVMEDREC	254		2
RVMEDTY	25C		2
RVMVMODE	2A0		2
RVMVSUSE	15F		2
RVNAME	160		2
RVNEXTYP	2CA		2
RVNLOC	2B4		2
RVNTFY	15B		2
RVNVOL	10		2

EDGRVEXT

Name	Offset	Hex Tag	Level
RVOBIN	AD		2
RVOBMEDN	2AC		2
RVOGER	149		2
RVOLNLOC	CF		2
RVOLOC	244		2
RVOPEN	148		2
RVOWNAC	15C		2
RVOWNID	FB		2
RVPENDRS	145		2
RVPERCENT	306		2
RVPPNUM	17E		2
RVPPTAPE	14B		2
RVPRERR	176		2
RVPVOL	A		2
RVPWERR	17A		2
RVRACK	168		2
RVRBYSET	2F2		2
RVRCEND	330		2
RVRCLNG	330	330	2
RVRELIXD	2CC		2
RVRELRSV	2CE		2
RVRELSI	2CD		2
RVREPL	158		2
RVRETDAT	BD		2
RVRETS	150		2
RVRQPRTY	2E4		2
RVSECLEV	113		2
RVSECLNG	11B		2
RVSGNAME	24C		2
RVSTACKED_VOLCOUNT	2FC		2
RVSTACKVOL_ENABLED	2F3		2
RVSTATUS	13D		2
RVSTBIN	A7		2
RVSTDATE	B3		2
RVSTORID	97		2
RVTRANS	241		2
RVTRERR	16E		2
RVTUSE	85		2
RVTWERR	172		2
RVTYPE	0		2
RVUNIT	160	160	2
RVUSE	8F		2
RVUSEFLD	1B8		2
RVUSERAC	15D		2
RVVER	186		2
RVVMUSE	15E		2
RVVOLSEQ	139		2
RVVOLSER	4		2
RVVOLTYPE	2CB		2
RVVOLTYPE_LOGICAL	2CB	D3	2
RVVOLTYPE_PHYSICAL	2CB	D7	2
RVVOLTYPE_STACKED	2CB	E2	2
RVVOL1	32A		2
RVVRS	146		2

EDGRVEXT

Name	Offset	Hex Tag	Level
RVVRSREL	2CC		2

Extract Data Set Extended Data Set Name Record: EDGRXEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	RXEXT	
<p>RXEXT: The extended extract record is a combination of the volume record and the dataset record with two additional data elements: XVMVDSNAM1 first dataset name of a volume set XVVOLCNT last volume sequence number of a volume set. In this record the date format depends on the DATEFORM selected by EDGHSKP execution parameter or the parmlib specified value.</p>					
0	(0)	CHARACTER	1	RXTYPE	Record type - C'X'
1	(1)	CHARACTER	3		Reserved
4	(4)	CHARACTER	6	XVVOLSER	Volume serial number
10	(A)	CHARACTER	6	XVPVOL	Previous volume in sequence
16	(10)	CHARACTER	6	XVNVOL	Next volume in sequence
22	(16)	CHARACTER	6		Reserved
<p>XVMDMVID: Is a unique token assigned to every volume and every data set in a multi-volume set.</p>					
28	(1C)	CHARACTER	8	XVMDMVID	Multi-dataset multi-volume id
36	(24)	CHARACTER	12		Reserved
<p>Start of common fields: The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.</p>					
48	(30)	CHARACTER	10	XVCRDATE	Create date of volume record
58	(3A)	CHARACTER	6	XVCRTIME	Create time volume record (hmmss)
64	(40)	CHARACTER	8	XVCRSID	Create system id of volume record
72	(48)	CHARACTER	10	XVLCDATE	Last change date of volume record
82	(52)	CHARACTER	6	XVLCTIME	Last change time of volume record (hmmss)
88	(58)	CHARACTER	8	XVLCUID	Last change user id of volume record
96	(60)	CHARACTER	8	XVLCSID	Last change system id of volume record
<p>End of common fields</p>					
104	(68)	CHARACTER	10	XVEXPDTO	Expiration date - original
114	(72)	CHARACTER	10	XVEXPDT	Expiration date - current
124	(7C)	CHARACTER	4	XVDEN	Recording density
128	(80)	CHARACTER	1	XVCOMP	Compaction used - Y/N
129	(81)	CHARACTER	4		RESERVED WAS NO DSN ON VOL
133	(85)	CHARACTER	10	XVTUSE	Tape usage in Kbytes
143	(8F)	CHARACTER	4	XVUUSE	Volume use count
147	(93)	CHARACTER	4		RESERVED WAS LABEL NO OF 1 FILE
151	(97)	CHARACTER	8	XVSTORID	Current location name one of: SHELF, LOCAL, REMOTE, DISTANT, installation-defined store, SMS-defined library name

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
159	(9F)	CHARACTER	8	XVDEST	Destination name one of: SHELF, LOCAL, REMOTE, DISTANT, installation-defined store, SMS-defined library name
Bin Numbers: If a volume is not moving (XVTRANS=N), and is in a storage location, XVSTBIN contains the current bin number and XVOBIN the bin number in the previous location.					
If a volume is moving (XVTRANS=Y), and moving to a storage location, XVSTBIN contains the target bin number and XVOBIN the bin number in the source location.					
167	(A7)	CHARACTER	6	XVSTBIN	Bin number
173	(AD)	CHARACTER	6	XVOBIN	Previous bin number
179	(B3)	CHARACTER	10	XVSTDATE	Movement tracking date
189	(BD)	CHARACTER	10	XVRETDAT	Retention date calculated by VRS
199	(C7)	CHARACTER	8	XVLONLOC	Loan location
207	(CF)	CHARACTER	8	XVOLNLOC	Previous loan location
215	(D7)	CHARACTER	10	XVLRDDAT	Date volume last read
225	(E1)	CHARACTER	10	XVLWTDAT	Date volume last written
Assigned date and time:					
These fields are set each time a volume changes either from or to scratch status.					
235	(EB)	CHARACTER	10	XVASDATE	Assigned date
245	(F5)	CHARACTER	6	XVASTIME	Assigned time (hhmmss)
251	(FB)	CHARACTER	8	XVOWNID	Volume owner userid
259	(103)	CHARACTER	8	XVCRUID	Creating userid
267	(10B)	CHARACTER	8	XVCRJOB	Creating jobname
275	(113)	CHARACTER	8	XVSECLEV	Security level - short
283	(11B)	CHARACTER	30	XVSECLNG	Security level - long
313	(139)	CHARACTER	4	XVVOLSEQ	Volume sequence number
317	(13D)	CHARACTER	8	XVSTATUS	Volume status one of: MASTER, USER, SCRATCH, INIT, ENTRY
325	(145)	CHARACTER	1	XVPENDRS	Volume pending release - Y/N
326	(146)	CHARACTER	1	XVVRS	Volume retained by VRS - Y/N
327	(147)	CHARACTER	1	XVLOAN	Volume on loan - Y/N
328	(148)	CHARACTER	1	XVOPEN	Volume is opened - Y/N
329	(149)	CHARACTER	1	XVOCER	Volume recorded by O/C/EOV - Y/N
330	(14A)	CHARACTER	1	XVDEFRET	Parmlib default retention used to generate the volume expdt - Y/N
331	(14B)	CHARACTER	1	XVPPTAPE	Program product tape - Y/N
Labels: The XVLABEL field provides information about what label types may be written on the volume. If BLP output has been used, the volume may no longer match this information. Any BLP output beyond file 1 on a volume is not recorded by RMM.					
332	(14C)	CHARACTER	3	XVLABEL	Label type SL/AL/NL/SUL/AUL
335	(14F)	CHARACTER	1	XVBLP	Volume last written BLP Y/N
Release Actions: The following 5 fields list the actions to be set for the volume when it is released. These are not the current actions. See XVACTION for the pending actions.					
336	(150)	CHARACTER	8	XVRETS	Return action - OWNER/SCRATCH
344	(158)	CHARACTER	1	XVREPL	Replace on release - Y/N
345	(159)	CHARACTER	1	XVINIT	Reinitialise - Y/N

EDGRXEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
346	(15A)	CHARACTER	1	XVERASE	Security erase - Y/N
347	(15B)	CHARACTER	1	XVNTFY	Notify owner - Y/N
348	(15C)	CHARACTER	1	XVOWNAC	Owner access - R/U/A
349	(15D)	CHARACTER	1	XVUSERAC	User access - R/U
350	(15E)	CHARACTER	1	XVVMUSE	VM use - Y/N
351	(15F)	CHARACTER	1	XVMVSUSE	MVS use - Y/N
352	(160)	CHARACTER	8	XVNAME	Media name
352	(160)		0	XVUNIT	"XVNAME,8" Old name for XVNAME field
360	(168)	CHARACTER	6	XVRACK	Rack number
366	(16E)	CHARACTER	4	XVTRERR	Temporary read errors
370	(172)	CHARACTER	4	XVTWERR	Temporary write errors
374	(176)	CHARACTER	4	XVPRERR	Permanent read errors
378	(17A)	CHARACTER	4	XVPWERR	Permanent write errors
Product Information: Includes number, release and feature code					
382	(17E)	CHARACTER	8	XVPPNUM	Program product number
390	(186)	CHARACTER	6	XVVER	Version/release/mod number
396	(18C)	CHARACTER	4	XVFEAT	Feature code
400	(190)	CHARACTER	40	XVACCINF	Accounting information
440	(1B8)	CHARACTER	30	XVUSEFLD	User description
470	(1D6)	CHARACTER	3	XVACCLST	Number of access list entries
473	(1D9)	CHARACTER	96	XVAUTIDS	Authorised user ids area
569	(239)	CHARACTER	8	XVHLOC	home location name
577	(241)	CHARACTER	1	XVTRANS	Volume in transit - Y/N
578	(242)	CHARACTER	1	XVLOCTYP	Location type one of: A-AUTO, M-MANUAL, S-STORE, blank
579	(243)	CHARACTER	1	XVDESTYP	Destination type one of: A-AUTO, M-MANUAL, S-STORE, blank
580	(244)	CHARACTER	8	XVOLOC	The previous location name
588	(24C)	CHARACTER	8	XVSGNAME	Storage group name
596	(254)	CHARACTER	8	XVMEDREC	Volume recording format one of: 18TRACK, 36TRACK, 128TRACK, 256TRACK
604	(25C)	CHARACTER	8	XVMEDTY	Volume media type one of: *, CST, ECCST, HPCT, EHPCT
612	(264)	CHARACTER	8	XVMEDCMP	Compaction technique one of: *, NONE, YES
620	(26C)	CHARACTER	8	XVMEDATR	Special attributes - NONE/RDCOMPAT
628	(274)	CHARACTER	44	XVDSNAM1	First file data set name
672	(2A0)	CHARACTER	1	XVMVMODE	Move mode - A-AUTOMOVE/M-MANUALMOVE
673	(2A1)	CHARACTER	1	XVDSNREC	Ds recording - Y/N
674	(2A2)	CHARACTER	2	XVALVERS	ANSI label versions
674	(2A2)		0	XVALCUR	"XVALVERS,1" Current label version one of blank, 1,3, or 4.
674	(2A2)		0	XVALREQ	"XVALVERS+1,1" Required label version one of blank, 3, or 4.
676	(2A4)	CHARACTER	8	XVBMEDN	Bin media name
684	(2AC)	CHARACTER	8	XVOBMEDN	Previous bin media name
692	(2B4)	CHARACTER	8	XVNLOC	Required location name - as determined by VRS or command
700	(2BC)	CHARACTER	4	XVLUDEV	Last used drive

Offsets	Dec	Hex	Type	Len	Name(Dim)	Description
Pending Actions: The following fields list the actions required for the volume. See XVRETS for the actions set when the volume is released.						
	704	(2C0)	CHARACTER	8	XVACTION(0)	
	704	(2C0)	CHARACTER	1	XVACTSCR	Pending action: return to scratch Y/N
	705	(2C1)	CHARACTER	1	XVACTREP	Pending action: replace volume Y/N
	706	(2C2)	CHARACTER	1	XVACTRET	Pending action: return to owner Y/N
	707	(2C3)	CHARACTER	1	XVACTINI	Pending action: initialize Y/N
	708	(2C4)	CHARACTER	1	XVACTERA	Pending action: erase Y/N
	709	(2C5)	CHARACTER	1	XVACTNOT	Pending action: notify Y/N
	710	(2C6)	CHARACTER	2	XVACTRSV	Reserved
	712	(2C8)	CHARACTER	1	XVABEND	Data set closed by abend - Y/N
	713	(2C9)	CHARACTER	1	XVHOMTYP	Home location type one of: A-AUTO, M-MANUAL, blank
	714	(2CA)	CHARACTER	1	XVNEXTYP	Next location type one of: A-AUTO, M-MANUAL, S-STORE, blank
	715	(2CB)	CHARACTER	1	XVVOLTYPE	Volume type
			11.1 ..11		XVVOLTYPE_LOGICAL	"C'L',1,C'C' "
			11.1 .111		XVVOLTYPE_PHYSICAL	"C'P',1,C'C'"
			111. ..1.		XVVOLTYPE_STACKED	"C'S',1,C'C'"
	716	(2CC)	CHARACTER	8	XVVRSREL(0)	VRS release options
	716	(2CC)	CHARACTER	1	XVRELIXD	Ignore expdt Y/N
	717	(2CD)	CHARACTER	1	XVRELSI	Scratch immediate Y/N
	718	(2CE)	CHARACTER	6	XVRELRSV	Reserved
	724	(2D4)	CHARACTER	16	XVCONTNR	In container name
	740	(2E4)	CHARACTER	4	XVRQPRTY	Movement priority
	744	(2E8)	CHARACTER	10	XVCAPACITY	Volume capacity in Mbytes
	754	(2F2)	CHARACTER	1	XVRBYSET	Volume retained by set - Y/N
	755	(2F3)	CHARACTER	1	XVSTACKVOL_ENABLED	Stacked volume record enabled and synchronized.
	756	(2F4)	CHARACTER	8	XVEXPTOKEN	Export token Unique value created at start of export to a new stacked volume. All volumes in a stacked volume have the same unique value
	764	(2FC)	CHARACTER	10	XVSTACKED_VOLCOUNT	Count of volumes stacked on a volume. Maintained if stacked volume fully enabled.
	774	(306)	CHARACTER	3	XVPERCENT	Volume percentage full
	777	(309)	CHARACTER	5	XVDSNNO	Number of Datasets on Volume
	782	(30E)	CHARACTER	5	XVLABNO1	Label No of first File on Vol
	787	(313)	CHARACTER	8	XVDCRSID	First file creation system ID
	795	(31B)	CHARACTER	1		Reserved
	END OF VOLUME PART					
	796	(31C)	CHARACTER	4	XVVOLCNT	Last volume sequence number of a volume set
	START OF DATASET PART					
	800	(320)	CHARACTER	4		Reserved
	804	(324)	CHARACTER	44	XDDSNNAME	Data set name
	Start of common fields:					
	The common fields are in the same place in each record type in the report extract file. This allows common processing of these field across multiple record types.					
	848	(350)	CHARACTER	10	XDCRDATE	Create date of data set record

EDGRXEXT

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
858	(35A)	CHARACTER	6	XDCRTIME	Create time (hhmmss) of data set
864	(360)	CHARACTER	8	XDCRSID	Create system id of data set record
872	(368)	CHARACTER	10	XDLCDATE	Last change date of data set record
882	(372)	CHARACTER	6	XDLCTIME	Last change time (hhmmss) of data set record
888	(378)	CHARACTER	8	XDLCUID	Last change user id of data set record
896	(380)	CHARACTER	8	XDLCSID	Last change system id of data set record
End of common fields					
904	(388)	CHARACTER	6		Reserved
910	(38E)	CHARACTER	4		RESERVED WAS DSEQ
914	(392)	CHARACTER	4	XDUNITAD	Creating drive address
918	(396)	CHARACTER	4	XDRECFM	Record format
922	(39A)	CHARACTER	4	XDVOLSEQ	Volume sequence number
926	(39E)	CHARACTER	6	XDLRECL	Logical record length
932	(3A4)	CHARACTER	6	XDBLKSZ	Physical block size
938	(3AA)	CHARACTER	8	XDBLKCNT	Block count
946	(3B2)	CHARACTER	8	XDOWNSN	Data set owner
954	(3BA)	CHARACTER	8	XDSECLV	Security level - short
962	(3C2)	CHARACTER	30	XDSECLNG	Security level - long
992	(3E0)	CHARACTER	1	XDCOMP	Compaction used - Y/N
993	(3E1)	CHARACTER	10	XDLRDDAT	Date data set last read
1003	(3EB)	CHARACTER	10	XDLWTDAT	Date data set last written
1013	(3F5)	CHARACTER	8	XDMCNAME	SMS management class
1021	(3FD)	CHARACTER	8	XDVRSVAL	VRS management value
1029	(405)	CHARACTER	8	XDSGNAME	SMS storage group name
1037	(40D)	CHARACTER	8	XDSCNAME	SMS storage class name
1045	(415)	CHARACTER	8	XDDCNAME	SMS data class name
1053	(41D)	CHARACTER	8	XDCRTJBN	Creating job name
1061	(425)	CHARACTER	1	XDVRSTYP	Matching VRS type one of: D-dataset, S-smsmc, V-vrsmv, M-dataset and vrsmv C-dataset and smsmc
1062	(426)	CHARACTER	44	XDVRSNAM	Matching VRS name
1106	(452)	CHARACTER	8	XDVRSJBN	Matching VRS job name mask
1114	(45A)	CHARACTER	10	XDRETDAT	Retention date
1124	(464)	CHARACTER	8	XDSTEPNM	Creating step name
1132	(46C)	CHARACTER	8	XDDDDNAME	Creating DD name
1140	(474)	CHARACTER	8		Reserved
Data set size: This is calculated by multiplying the blocksize with the number of blocks.					
1148	(47C)	CHARACTER	10	XDDSSIZE	Approx. size of file Kbytes
1158	(486)	CHARACTER	1	XDABEND	Dset closed by abend Y/N
XDCAT: Set to 'Y' when opened after allocation determines VOLSER by reference to the catalog. Once set to 'Y' it is never changed.					
1159	(487)	CHARACTER	1	XDCAT	Dset used via catalog Y/N
1160	(488)	CHARACTER	1	XDVRSR	Retained by VRS Y/N
1161	(489)	CHARACTER	3	XDRSVMW1	Reserved
1164	(48C)	CHARACTER	4		RESERVED WAS LABEL NUMBER

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
Primary VRS subchain name:					
This is the retaining VRS in the matching primary VRS chain. It is set only if retained by a NAME VRS subchain in the primary VRS.					
1168	(490)	CHARACTER	8	XDVRSSCH	Primary VRS subchain name
1176	(498)	CHARACTER	10	XDVRSXDS	Primary VRS subchain start date
Retaining Secondary VRS name:					
Matching VRS name and job name are included where a secondary VRS also matches. The retaining VRS subchain NAME in this matching VRS is set if it is used to retain the data set.					
1186	(4A2)	CHARACTER	8	XD2VNME	Secondary VRS name mask
1194	(4AA)	CHARACTER	8	XD2VJBN	Secondary VRS jobname mask
1202	(4B2)	CHARACTER	8	XD2VSCB	Secondary VRS subchain name
1210	(4BA)	CHARACTER	10	XD2VXDS	Secondary VRS subchain startdate
1220	(4C4)	CHARACTER	10	XDTOTAL_BLKCNT	Total block count across this and previous volumes
1230	(4CE)	CHARACTER	3	XDPERCENT	Percentage of volume used by data set
1233	(4D1)	CHARACTER	8	XDCPGM	Creating program name
1241	(4D9)	CHARACTER	8	XDLPGM	Last used program name
1249	(4E1)	CHARACTER	8	XDLJOB	Last use job name
1257	(4E9)	CHARACTER	8	XDLSTEP	Last use step name
1265	(4F1)	CHARACTER	8	XDLDDNM	Last use DD name
1273	(4F9)	CHARACTER	4	XDLDEVN	Last use device number
End of data set part					
1277	(4FD)	CHARACTER	44	XVMVDSNAM1	First dsname of a volume set
Start of mixed data area					
1321	(529)	CHARACTER	5	XDDSNSEQ	Data set sequence number new
1326	(52E)	CHARACTER	5	XDLABNO	Label number label=(xx,II) new
1331	(533)	CHARACTER	6	XVDESTBIN	Destination Bin number
1337	(539)	CHARACTER	8	XVDESTBINMEDIA	Destination Bin Media name
1345	(541)	CHARACTER	6	XVVOL1	VOL1 label volser
1351	(547)	CHARACTER	1	RXRCEND(0)	End of RXEXT
1351	(547)		0	RXRCLNG	"RXRCEND-RXEXT" Length of RXEXT

EDGRXEXT Cross Reference

Name	Offset	Hex Tag	Level
RXEXT	0		1
RXRCEND	547		2
RXRCLNG	547	547	2
RXTYPE	0		2
XDABEND	486		2
XDBLKCNT	3AA		2
XDBLKSZ	3A4		2
XDCAT	487		2
XDCOMP	3E0		2
XDCPGM	4D1		2
XDCRDATE	350		2
XDCRSID	360		2
XDCRTIME	35A		2

EDGRXEXT

Name	Offset	Hex Tag	Level
XDCRTJBN	41D		2
XDDCNAME	415		2
XDDDDNAME	46C		2
XDDSDNAME	324		2
XDDSNSEQ	529		2
XDDSSIZE	47C		2
XDLABNO	52E		2
XDLCDATE	368		2
XDLCSID	380		2
XDLCTIME	372		2
XDLGUID	378		2
XDLDDNM	4F1		2
XDLDEVN	4F9		2
XDLJOB	4E1		2
XDLPGM	4D9		2
XDLRDDAT	3E1		2
XDLRECL	39E		2
XDLSTEP	4E9		2
XDLWTDAT	3EB		2
XDMCNAME	3F5		2
XDOWNDSN	3B2		2
XDPERCENT	4CE		2
XDRECFM	396		2
XDRETDAT	45A		2
XDRSVMW1	489		2
XDSCNAME	40D		2
XDSECLEV	3BA		2
XDSECLNG	3C2		2
XDSGNAME	405		2
XDSTEPNM	464		2
XDTOTAL_BLKCNT	4C4		2
XDUNITAD	392		2
XDVOLSEQ	39A		2
XDVRSJBN	452		2
XDVRSNAM	426		2
XDVRSR	488		2
XDVRSSCH	490		2
XDVRSTYP	425		2
XDVRSVAL	3FD		2
XDVRSXDS	498		2
XD2VJBN	4AA		2
XD2VNME	4A2		2
XD2VSCH	4B2		2
XD2VXDS	4BA		2
XVABEND	2C8		2
XVACCINF	190		2
XVACCLST	1D6		2
XVACTERA	2C4		2
XVACTINI	2C3		2
XVACTION	2C0		2
XVACTNOT	2C5		2
XVACTREP	2C1		2
XVACTRET	2C2		2
XVACTRSV	2C6		2

EDGRXEXT

Name	Offset	Hex Tag	Level
XVACTSCR	2C0		2
XVALCUR	2A2	2A2	2
XVALREQ	2A2	2A3	2
XVALVERS	2A2		2
XVASDATE	EB		2
XVASTIME	F5		2
XVAUTIDS	1D9		2
XVBLP	14F		2
XVBMEDN	2A4		2
XVCAPACITY	2E8		2
XVCOMP	80		2
XVCONTNR	2D4		2
XVCRDATE	30		2
XVCRJOB	10B		2
XVCRSID	40		2
XVCRTIME	3A		2
XVCRUID	103		2
XVDCRSID	313		2
XVDEFRET	14A		2
XVDEN	7C		2
XVDEST	9F		2
XVDESTBIN	533		2
XVDESTBINMEDIA	539		2
XVDESTYP	243		2
XVDSNAM1	274		2
XVDSNNO	309		2
XVDSNREC	2A1		2
XVERASE	15A		2
XVEXPDT	72		2
XVEXPDTO	68		2
XVEXPTOKEN	2F4		2
XVFEAT	18C		2
XVHLOC	239		2
XVHOMTYP	2C9		2
XVINIT	159		2
XVLABEL	14C		2
XVLABNO1	30E		2
XVLCDATE	48		2
XVLCSID	60		2
XVLCTIME	52		2
XVLCUID	58		2
XVLOAN	147		2
XVLOCTYP	242		2
XVLONLOC	C7		2
XVLRDDAT	D7		2
XVLUDEV	2BC		2
XVLWTDAT	E1		2
XVMDMVID	1C		2
XVMEDATR	26C		2
XVMEDCMP	264		2
XVMEDREC	254		2
XVMEDTY	25C		2
XVMVDSNAM1	4FD		2
XVMVMODE	2A0		2

EDGRXEXT

Name	Offset	Hex Tag	Level
XVMVSUSE	15F		2
XVNAME	160		2
XVNEXTYP	2CA		2
XVNLOC	2B4		2
XVNTFY	15B		2
XVNVOL	10		2
XVOBIN	AD		2
XVOBMEDN	2AC		2
XVOCER	149		2
XVOLNLOC	CF		2
XVOLOC	244		2
XVOPEN	148		2
XVOWNAC	15C		2
XVOWNID	FB		2
XVPENDRS	145		2
XVPERCENT	306		2
XVPPNUM	17E		2
XVPPTAPE	14B		2
XVPRERR	176		2
XVPVOL	A		2
XVPWERR	17A		2
XVRACK	168		2
XVRBYSET	2F2		2
XVRELIXD	2CC		2
XVRELRSV	2CE		2
XVRELSI	2CD		2
XVREPL	158		2
XVRETDAT	BD		2
XVRETS	150		2
XVRQPRTY	2E4		2
XVSECLEV	113		2
XVSECLNG	11B		2
XVSGNAME	24C		2
XVSTACKED_VOLCOUNT	2FC		2
XVSTACKVOL_ENABLED	2F3		2
XVSTATUS	13D		2
XVSTBIN	A7		2
XVSTDAT	B3		2
XVSTORID	97		2
XVTRANS	241		2
XVTRERR	16E		2
XVTUSE	85		2
XVTWERR	172		2
XVUNIT	160	160	2
XVUSE	8F		2
XVUSEFLD	1B8		2
XVUSERAC	15D		2
XVVER	186		2
XVVMUSE	15E		2
XVVOLCNT	31C		2
XVVOLSEQ	139		2
XVVOLSER	4		2
XVVOLTYPE	2CB		2
XVVOLTYPE_LOGICAL	2CB	D3	2

Name	Offset	Hex Tag	Level
XVVOLTYPE_PHYSICAL	2CB	D7	2
XVVOLTYPE_STACKED	2CB	E2	2
XVVOL1	541		2
XVVRS	146		2
XVVRSREL	2CC		2

SMF Audit Record Header Information: EDGSMFAR

EDGSMFAR maps the DFSMSrmm SMF audit record header. See "Using the Audit Report" on page 77 for more information about the DFSMSrmm audit report.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		SMFAR	
START OF RMM SMFAR					
0	(0)	BITSTRING	1	SMFADRC(0)	** SMF AUDIT RECORD **
0	(0)	BITSTRING	2	SMFADLEN	** RECORD LENGTH **
2	(2)	CHARACTER	2		** RESERVED **
4	(4)	BITSTRING	1	SMFADFLG	** SYSTEM TYPE : **
		EQU X'04' MVS/XA			
		EQU X'0E' MVS/ESA			
5	(5)	BITSTRING	1	SMFADRTY	** RECORD TYPE **
6	(6)	BITSTRING	4	SMFADTME	** TIME SINCE MIDNIGHT IN ** HUNDREDTHS OF A SECOND ** THAT RECORD WAS MOVED TO ** THE SMF BUFFER.
10	(A)		4	SMFADDTE	** DATE RECORD WAS MOVED ** TO THE SMF BUFFER ** IN THE FORM 0CYYDDDF ** WHERE F IS THE SIGN AND ** C IS 0 FOR 19YY AND ** 1 FOR 20YY.
14	(E)	CHARACTER	4	SMFADSID	** SYSTEM IDENTIFICATION **
18	(12)	CHARACTER	8	SMFADJBN	** JOB NAME **
26	(1A)	CHARACTER	4	SMFADRST	** READER START TIME **
30	(1E)	CHARACTER	4	SMFADRSD	** READER START DATE **
END OF SMF RECORD HEADER SECTION					
34	(22)	CHARACTER	8	SMFADUID	** RACF USER ID **
42	(2A)	CHARACTER	1	SMFADACT	** ACTIVITY TYPE : ** ** A - RECORD ADDED ** ** C - RECORD CHANGED ** ** D - RECORD DELETED **
43	(2B)	BITSTRING	1	SMFADREC(0)	** START OF INFORMATION **
END OF SMF AUDIT RECORD					
END OF RMM SMFAR					

EDGSMFAR Cross Reference

Name	Hex Offset	Hex Value	Level
SMFADACT	2A		2
SMFADDTE	A		2
SMFADFLG	4		2
SMFADJBN	12		2
SMFADLEN	0		2
SMFADRC	0		2

EDGSMFAR

Name	Hex Offset	Hex Value	Level
SMFADREC	2B		2
SMFADRSD	1E		2
SMFADRST	1A		2
SMFADRSTY	5		2
SMFADSID	E		2
SMFADTME	6		2
SMFADUID	22		2

SMF Security Record Information: EDGSMFSR

EDGSMFSR maps the DFSMSrmm SMF security record. See "Using the Security Report" on page 75 for more information about the DFSMSrmm audit report.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		SMFSR	
START OF RMM SMFSR					
0	(0)	BITSTRING	140	SMFSAREC	** SMF SECURITY AUDIT RECORD **
0	(0)	BITSTRING	2	SMFSALEN	** RECORD LENGTH **
2	(2)	CHARACTER	2		** RESERVED **
4	(4)	BITSTRING	1	SMFSAFLG	** SYSTEM TYPE : **
	EQU X'04'	MVS/XA			
	EQU X'0E'	MVS/ESA			
5	(5)	BITSTRING	1	SMFSARTY	** RECORD TYPE **
6	(6)	BITSTRING	4	SMFSATME	** TIME SINCE MIDNIGHT IN ** HUNDREDTHS OF A SECOND ** THAT RECORD WAS MOVED TO ** THE SMF BUFFER.
10	(A)		4	SMFSADTE	** DATE RECORD WAS MOVED ** TO THE SMF BUFFER ** IN THE FORM 0CYYDDDF ** WHERE F IS THE SIGN AND ** C IS 0 FOR 19YY AND ** 1 FOR 20YY.
14	(E)	CHARACTER	4	SMFSASID	** SYSTEM IDENTIFICATION **
18	(12)	CHARACTER	8	SMFSAJBN	** JOB NAME **
26	(1A)	CHARACTER	4	SMFSARST	** READER START TIME **
30	(1E)	CHARACTER	4	SMFSARSD	** READER START DATE **
END OF SMF RECORD HEADER SECTION					
34	(22)	CHARACTER	8	SMFSAUIF	** USER IDENTIFICATION **
42	(2A)	CHARACTER	8	SMFSAUID	** RACF USER ID **
50	(32)	CHARACTER	8	SMFSACGP	** RACF CONNECT GROUP **
58	(3A)	CHARACTER	1	SMFSAVER	** RECORD VERSION IDENTIFIER (2) **
59	(3B)	CHARACTER	1	SMFSAACT	** ACTIVITY TYPE : ** * C - DATASET CREATE ** * E - DATASET EXTEND ** * U - DATASET UPDATE ** * R - DATASET READ ACCESS ** * D - DATASET DELETE **
60	(3C)	BITSTRING	1	SMFSASTP	** SECURITY TYPE ** * (CLASSIFICATION NUMBER) **
61	(3D)	CHARACTER	1		** RESERVED **
62	(3E)	CHARACTER	44	SMFSADSN	** DATASET NAME **
106	(6A)	CHARACTER	6	SMFSAVOL	** VOLUME SERIAL NUMBER **

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
112	(70)	CHARACTER	8	SMFSAUNT	** DEVICE TYPE **
120	(78)	BITSTRING	2	SMFSADSQ	** DATASET SEQUENCE NUMBER **
122	(7A)	BITSTRING	2	SMFSAVSQ	** VOLUME SEQUENCE NUMBER **
124	(7C)	CHARACTER	16		** RESERVED **
END OF SMF SECURITY RECORD					
140	(8C)	SIGNED 1... 11..	4	SMFSEND(0) SMFSLNG	** END OF SMFSR ** "SMFSEND-SMFSAREC" ** MAX LENGTH OF SMFSR ** * * *
END OF RMM SMFSR					

EDGSMFSR Cross Reference

Name	Offset	Hex Tag	Level
SMFSAACT	3B		2
SMFSACGP	32		2
SMFSADSN	3E		2
SMFSADSQ	78		2
SMFSADTE	A		2
SMFSAFLG	4		2
SMFSAJBN	12		2
SMFSALEN	0		2
SMFSAREC	0		2
SMFSARSD	1E		2
SMFSARST	1A		2
SMFSARTY	5		2
SMFSASID	E		2
SMFSASTP	3C		2
SMFSATME	6		2
SMFSAUID	2A		2
SMFSAUIF	22		2
SMFSAUNT	70		2
SMFSAVER	3A		2
SMFSAVOL	6A		2
SMFSAVSQ	7A		2
SMFSEND	8C		2
SMFSLNG	8C	8C	2

Product-sensitive Programming Interface Mapping Macros

This section contains product-sensitive programming interface and associated guidance information. The macros in this section are broken down into the following components:

- EDGACTRC ACTIVITY File
- DFSMSrmm Installation Exit parameter lists
- SMF record mapping macros for your security and audit needs

ACTIVITY File Record Macro: EDGACTRC

EDGACTRC maps the DFSMSrmm ACTIVITY File. See "Using the Inventory Management ACTIVITY File" on page 43 for information about using the ACTIVITY file.

EDGACTRC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	ACTRC	
ACTRC: RMM ACTIVITY file records					
0	(0)	SIGNED	4	ACTRC_RDW(0)	record descriptor word
0	(0)	SIGNED	2	ACTRC_RDW_LEN	record descriptor - length
2	(2)	BITSTRING	2	ACTRC_RDW_SEG	record descriptor - segment
Common record prefix					
4	(4)	SIGNED	4	ACTRC_PREFIX(0)	common prefix
4	(4)	CHARACTER	1	ACTRC_PRE_TYPE	activity file record type
		11.. 1...		ACTRC_PRE_TYPE_HDR	"C'H" header record
		11.. .1..		ACTRC_PRE_TYPE_DSN	"C'D" data set details record
		111. .1.1		ACTRC_PRE_TYPE_VOL	"C'V" volume details record
5	(5)	CHARACTER	3		reserved
8	(8)	SIGNED	4	ACTRC_DATA(0)	start overlay for details areas
Header Record					
8	(8)	CHARACTER	10	ACTRC_HDR_RUN_DATE	inventory management date
18	(12)	CHARACTER	6	ACTRC_HDR_RUN_TIME	inventory management time
24	(18)	CHARACTER	10	ACTRC_HDR_VERIFY_DATE	inventory mgmt. VERIFY date
34	(22)	CHARACTER	16	ACTRC_HDR_EXEC(0)	execution parameters
34	(22)	CHARACTER	1	ACTRC_HDR_BACKUP	BACKUP: Y/N
35	(23)	CHARACTER	1	ACTRC_HDR_DSTORE	DSTORE: Y/N
36	(24)	CHARACTER	1	ACTRC_HDR_EXPROC	EXPROC: Y/N
37	(25)	CHARACTER	1	ACTRC_HDR_RPTEXT	RPTEXT: Y/N
38	(26)	CHARACTER	1	ACTRC_HDR_VRSEL	VRSEL: Y/N
39	(27)	CHARACTER	1	ACTRC_HDR_VERIFY	VERIFY: Y/N
40	(28)	CHARACTER	1	ACTRC_HDR_DATE	DATE for VERIFY run: Y/N
41	(29)	CHARACTER	1	ACTRC_HDR_DATEFORM	DATEFORM:
		11.. ...1		ACTRC_HDR_DATEFORM_AMERICAN	"C'A" American
		11.. .1.1		ACTRC_HDR_DATEFORM_EUROPEAN	"C'E" European
		11.. 1..1		ACTRC_HDR_DATEFORM_ISO	"C'I" ISO
		11.1 ...1		ACTRC_HDR_DATEFORM_JULIAN	"C'J" Julian
42	(2A)	CHARACTER	1	ACTRC_HDR_CATSYNCH	CATSYNCH: Y/N
43	(2B)	CHARACTER	7		reserved
50	(32)	CHARACTER	31	ACTRC_HDR_OPTIONS(0)	parmlib options
50	(32)	CHARACTER	1	ACTRC_HDR_VRSJOBNAME	VRSJOBNAME priority
		1111 ...1		ACTRC_HDR_VRSJOBNAME_FIRST	"C'1" jobname first
		1111 ..1.		ACTRC_HDR_VRSJOBNAME_SECOND	"C'2" jobname second
51	(33)	CHARACTER	1	ACTRC_HDR_VRSCHANGE	VRSCHANGE: V/I
		111. .1.1		ACTRC_HDR_VRSCHANGE_VERIFY	"C'V" verify
		11.. 1..1		ACTRC_HDR_VRSCHANGE_INFO	"C'I" information
52	(34)	CHARACTER	4	ACTRC_HDR_CATRETPD	CATRETPD hours
56	(38)	CHARACTER	10	ACTRC_HDR_VRSMIN_COUNT	VRSMIN minimum number of VRSs
66	(42)	CHARACTER	1	ACTRC_HDR_VRSMIN_ACTION	

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
					VRSMIN action:
				ACTRC_HDR_VRSMIN_ACTION_FAIL	"C'F'" fail
				ACTRC_HDR_VRSMIN_ACTION_WARN	"C'W'" warning
				ACTRC_HDR_VRSMIN_ACTION_INFO	"C'I'" information
67	(43)	CHARACTER	1	ACTRC_HDR_OPT_VRSEL	VRSEL: N/O
		11.1 .1.1		ACTRC_HDR_OPT_VRSEL_NEW	"C'N'" new:
		11.1 .11.		ACTRC_HDR_OPT_VRSEL_OLD	"C'O'" old
68	(44)	CHARACTER	1	ACTRC_HDR_UNCATALOG	UNCATALOG:
		11.1 .1.1		ACTRC_HDR_UNCATALOG_NO	"C'N'" no
		111. 1...		ACTRC_HDR_UNCATALOG_YES	"C'Y'" yes
		111. ..1.		ACTRC_HDR_UNCATALOG_SCRATCH	"C'S'" scratch volume only
69	(45)	CHARACTER	1	ACTRC_HDR_TPRACF	TPRACF:
		11.1 .1.1		ACTRC_HDR_TPRACF_NONE	"C'N'" none
		11.1 .111		ACTRC_HDR_TPRACF_PREDEFINED	"C'P'" predefined profiles
		11.. ...1		ACTRC_HDR_TPRACF_AUTOMATIC	"C'A'" automatic profiles
70	(46)	CHARACTER	8	ACTRC_HDR_SYSID	SYSID:
78	(4E)	CHARACTER	1	ACTRC_HDR_CATSYSID	CATSYSID:
		11.1 .1.1		ACTRC_HDR_CATSYSID_NOT_SET	"C'N'" not set
		111. 1...		ACTRC_HDR_CATSYSID_SET	"C'Y'" set to 1-16 sysid's
		.1.1 11..		ACTRC_HDR_CATSYSID_SHARED	"C'*'" set to fully shared
79	(4F)	CHARACTER	1	ACTRC_HDR_OPT_RETAINBY	RETAINBY V/S
		111. .1.1		ACTRC_HDR_OPT_RETAINBY_VOLUME	"C'V'" volume
		111. ..1.		ACTRC_HDR_OPT_RETAINBY_SET	"C'S'" set
80	(50)	CHARACTER	1	ACTRC_HDR_OPT_MOVEBY	MOVEBY V/S
		111. .1.1		ACTRC_HDR_OPT_MOVEBY_VOLUME	"C'V'" volume
		111. ..1.		ACTRC_HDR_OPT_MOVEBY_SET	"C'S'" set
		.1.. 11.1		ACTRC_HDR_LEN	"*-ACTRC_PREFIX" length of header record

Data Set Record

8	(8)	CHARACTER	44	ACTRC_DSN_DSNAME	data set name
52	(34)	CHARACTER	8	ACTRC_DSN_JOBNAME	creating job name
60	(3C)	CHARACTER	6	ACTRC_DSN_VOL	volume serial number
66	(42)	CHARACTER	4		Reserved was dsseq
70	(46)	CHARACTER	4		Reserved was PHY file seq

EDGACTRC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
74	(4A)	CHARACTER	10	ACTRC_DSN_CRDATE	data set creation date
84	(54)	CHARACTER	6	ACTRC_DSN_CRTIME	data set creation time
90	(5A)	CHARACTER	8	ACTRC_DSN_LOC	volume location
98	(62)	CHARACTER	8	ACTRC_DSN_DEST	volume destination
106	(6A)	CHARACTER	8	ACTRC_DSN_SMS_MC	SMS management class name
114	(72)	CHARACTER	8	ACTRC_DSN_VRS_MV	VRS management value name
122	(7A)	CHARACTER	1	ACTRC_DSN_CATLG	data set catalog status
		111. 1..		ACTRC_DSN_CATLG_YES	"C'Y'" cataloged
		11.1 .1.1		ACTRC_DSN_CATLG_NO	"C'N'" not cataloged
		11.. .11.		ACTRC_DSN_CATLG_FAILED	"C'F'" locate failed
		111. .1..		ACTRC_DSN_CATLG_UNKNOWN	"C'U'" current status unknown
123	(7B)	CHARACTER	10	ACTRC_DSN_CYCLE	primary vrs data set cycle number
133	(85)	CHARACTER	10	ACTRC_DSN_2CYCLE	secondary vrs data set cycle number
143	(8F)	CHARACTER	1	ACTRC_DSN_SUBCHAIN_DROP	primary subchain drop reason
144	(90)	CHARACTER	1	ACTRC_DSN_2SUBCHAIN_DROP	secondary subchain drop reason
145	(91)	CHARACTER	1	ACTRC_DSN_OLD_CATLG	old catalog status
146	(92)	CHARACTER	1	ACTRC_DSN_NEW_CATLG	new catalog status
147	(93)	CHARACTER	31		reserved
178	(B2)	CHARACTER	8	ACTRC_DSN_CHANGE(0)	changes to data set details
178	(B2)	CHARACTER	1	ACTRC_DSN_CHNG_VRS	vital rec status: Y/N
179	(B3)	CHARACTER	1	ACTRC_DSN_CHNG_RETDATE	retention date: Y/N
180	(B4)	CHARACTER	1	ACTRC_DSN_CHNG_MATCH	matching VRS: Y/N
181	(B5)	CHARACTER	1	ACTRC_DSN_CHNG_SUBCHAIN	retaining Subchain: Y/N
182	(B6)	CHARACTER	1	ACTRC_DSN_CHNG_CATALOG	catalog status: Y/N
183	(B7)	CHARACTER	3		reserved
186	(BA)	CHARACTER	1	ACTRC_DSN_OLD_VITAL	old vital record status: Y/N
187	(BB)	CHARACTER	1	ACTRC_DSN_NEW_VITAL	new vital record status: Y/N
188	(BC)	CHARACTER	1	ACTRC_DSN_DROP	reason for non-retention:
		111. .11.		ACTRC_DSN_DROP_WHILECATALOG	"C'W'" WHILECATALOG
		111. .1..		ACTRC_DSN_DROP_UNTILEXPIRED	"C'U'" UNTILEXPIRED
		11.. ..11		ACTRC_DSN_DROP_CYCLES	"C'C'" cycles exceeded
		11.. .1..		ACTRC_DSN_DROP_DAYS	"C'D'" days since creation exceeded
		11.1 ..11		ACTRC_DSN_DROP_LASTREF	"C'L'" days since last reference days exceeded
		111. .111		ACTRC_DSN_DROP_EXTRADAYS	"C'X'" days since subchain start exceeded
		11.. ..1.		ACTRC_DSN_DROP_BYDAYSCYCLE	"C'B'" by-days-cycles exceeded
		11.1 .1.1		ACTRC_DSN_DROP_NO_MATCH	"C'N'" No VRS match

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
		11.. .111		ACTRC_DSN_DROP_DUP_GDG	"C'G'" GDG cycle; duplicate GDG
		111. .1.1		ACTRC_DSN_DROP_VOL_RELEASED	"C'V'" Volume released / scratch
189	(BD)	CHARACTER	8	ACTRC_DSN_NEW_LOC	new required data set location
197	(C5)	CHARACTER	10	ACTRC_DSN_OLD_RETDATE	old data set retention date:
207	(CF)	CHARACTER	10	ACTRC_DSN_NEW_RETDATE	new data set retention date: Format: as per DATEFORM parm. Special date formats: WHILECATLG CYCL/nnnnn CATRETPD
217	(D9)	CHARACTER	113	ACTRC_DSN_OLD_MATCH(0)	old matching VRS
217	(D9)	CHARACTER	1	ACTRC_DSN_OLD_MTYPE	old primary VRS type:
		11.. .1..		ACTRC_DSN_OLD_MTYPE_DSN	"C'D'" data set name
		111. ..1.		ACTRC_DSN_OLD_MTYPE_SMS	"C'S'" SMS management class
		111. .1.1		ACTRC_DSN_OLD_MTYPE_VRS	"C'V'" VRS management value
		11.1 .1..		ACTRC_DSN_OLD_MTYPE_MIX	"C'M'" DSN and VRS mgmt value
		11.. ..11		ACTRC_DSN_OLD_MTYPE_DSNSMS	"C'C'" DSN and SMS mgmt class
218	(DA)	CHARACTER	44	ACTRC_DSN_OLD_MMASK	old primary VRS mask
262	(106)	CHARACTER	8	ACTRC_DSN_OLD_MJOB	old primary VRS job name
270	(10E)	CHARACTER	8	ACTRC_DSN_OLD_M2MASK	old second. VRS mask
278	(116)	CHARACTER	8	ACTRC_DSN_OLD_M2JOB	old second VRS job name
286	(11E)	CHARACTER	8	ACTRC_DSN_OLD_MNAME	old primary VRS subchain name
294	(126)	CHARACTER	10	ACTRC_DSN_OLD_MDATE	old primary VRS subchain start date
304	(130)	CHARACTER	8	ACTRC_DSN_OLD_M2NAME	old second. VRS subchain name
312	(138)	CHARACTER	10	ACTRC_DSN_OLD_M2DATE	old second. VRS subchain start date
322	(142)	CHARACTER	8		reserved
330	(14A)	CHARACTER	113	ACTRC_DSN_NEW_MATCH(0)	new matching VRS
330	(14A)	CHARACTER	1	ACTRC_DSN_NEW_MTYPE	old primary VRS type:
		11.. .1..		ACTRC_DSN_NEW_MTYPE_DSN	"C'D'" data set name
		111. ..1.		ACTRC_DSN_NEW_MTYPE_SMS	"C'S'" SMS management class
		111. .1.1		ACTRC_DSN_NEW_MTYPE_VRS	"C'V'" VRS management value
		11.1 .1..		ACTRC_DSN_NEW_MTYPE_MIX	"C'M'" DSN and VRS mgmt value
		11.. ..11		ACTRC_DSN_NEW_MTYPE_DSNSMS	"C'C'" DSN and SMS mgmt class
331	(14B)	CHARACTER	44	ACTRC_DSN_NEW_MMASK	new primary VRS mask
375	(177)	CHARACTER	8	ACTRC_DSN_NEW_MJOB	new primary VRS job name
383	(17F)	CHARACTER	8	ACTRC_DSN_NEW_M2MASK	new second. VRS mask
391	(187)	CHARACTER	8	ACTRC_DSN_NEW_M2JOB	new second VRS job name
399	(18F)	CHARACTER	8	ACTRC_DSN_NEW_MNAME	new primary VRS subchain name

EDGACTRC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
407	(197)	CHARACTER	10	ACTRC_DSN_NEW_MDATE	new primary VRS subchain start date
417	(1A1)	CHARACTER	8	ACTRC_DSN_NEW_M2NAME	new second. VRS subchain name
425	(1A9)	CHARACTER	10	ACTRC_DSN_NEW_M2DATE	new second. VRS subchain start date
435	(1B3)	CHARACTER	8		reserved
443	(1BB)	CHARACTER	5	ACTRC_DSN_DSEQ	data set sequence number
448	(1C0)	CHARACTER	5	ACTRC_DSN_FILESEQ	physical file sequence num
448	(1C0)		0	ACTRC_DSN_LENGTH	**ACTRC_PREFIX" length of data set record
Volume Record					
	....1..			ACTRC_VOL_LEN	**ACTRC_PREFIX" length of volume record
End of ACTRC assembler mapping					
453	(1C5)		0	ACTRC_LEN	**ACTRC_PREFIX" maximum record length

EDGACTRC Constants

Len	Type	Value	Name	Description
1	CHARACTER	H	ACTRC_PRE_TYPE_HDR	
1	CHARACTER	D	ACTRC_PRE_TYPE_DSN	
1	CHARACTER	V	ACTRC_PRE_TYPE_VOL	
1	CHARACTER	1	ACTRC_HDR_VRSJOBNAME_FIRST	
1	CHARACTER	2	ACTRC_HDR_VRSJOBNAME_SECOND	
1	CHARACTER	N	ACTRC_HDR_OPT_VRSEL_NEW	
1	CHARACTER	O	ACTRC_HDR_OPT_VRSEL_OLD	
1	CHARACTER	N	ACTRC_HDR_UNCATALOG_NO	
1	CHARACTER	Y	ACTRC_HDR_UNCATALOG_YES	
1	CHARACTER	S	ACTRC_HDR_UNCATALOG_SCRATCH	
1	CHARACTER	N	ACTRC_HDR_TPRACF_NONE	
1	CHARACTER	P	ACTRC_HDR_TPRACF_PREDEFINED	
1	CHARACTER	A	ACTRC_HDR_TPRACF_AUTOMATIC	
1	CHARACTER	N	ACTRC_HDR_CATSYSID_NOT_SET	
1	CHARACTER	Y	ACTRC_HDR_CATSYSID_SET	
1	CHARACTER	*	ACTRC_HDR_CATSYSID_SHARED	
1	CHARACTER	V	ACTRC_HDR_OPT_RETAINBY_VOLUME	
1	CHARACTER	S	ACTRC_HDR_OPT_RETAINBY_SET	
1	CHARACTER	V	ACTRC_HDR_OPT_MOVEBY_VOLUME	
1	CHARACTER	S	ACTRC_HDR_OPT_MOVEBY_SET	
1	CHARACTER	Y	ACTRC_DSN_CATLG_YES	
1	CHARACTER	N	ACTRC_DSN_CATLG_NO	
1	CHARACTER	F	ACTRC_DSN_CATLG_FAILED	
1	CHARACTER	U	ACTRC_DSN_CATLG_UNKNOWN	
1	CHARACTER	W	ACTRC_DSN_DROP_WHILECATALOG	
1	CHARACTER	U	ACTRC_DSN_DROP_UNTILEXPIRED	
1	CHARACTER	C	ACTRC_DSN_DROP_CYCLES	
1	CHARACTER	D	ACTRC_DSN_DROP_DAYS	
1	CHARACTER	L	ACTRC_DSN_DROP_LASTREF	
1	CHARACTER	X	ACTRC_DSN_DROP_EXTRADAYS	
1	CHARACTER	B	ACTRC_DSN_DROP_BYDAYSCYCLE	
1	CHARACTER	N	ACTRC_DSN_DROP_NO_MATCH	

Constants for EDGACTRC

Len	Type	Value	Name	Description
1	CHARACTER	G	ACTRC_DSN_DROP_DUP_GDG	
1	CHARACTER	V	ACTRC_DSN_DROP_VOL_RELEASED	

EDGACTRC Cross Reference

Name	Offset	Hex Tag	Level
ACTRC	0		1
ACTRC_DATA	8		2
ACTRC_DSN_CATLG	7A		2
ACTRC_DSN_CATLG_FAILED	7A	C6	2
ACTRC_DSN_CATLG_NO	7A	D5	2
ACTRC_DSN_CATLG_UNKNOWN	7A	E4	2
ACTRC_DSN_CATLG_YES	7A	E8	2
ACTRC_DSN_CHANGE	B2		2
ACTRC_DSN_CHNG_CATALOG	B6		2
ACTRC_DSN_CHNG_MATCH	B4		2
ACTRC_DSN_CHNG_RETDATE	B3		2
ACTRC_DSN_CHNG_SUBCHAIN	B5		2
ACTRC_DSN_CHNG_VRS	B2		2
ACTRC_DSN_CRDATE	4A		2
ACTRC_DSN_CRTIME	54		2
ACTRC_DSN_CYCLE	7B		2
ACTRC_DSN_DEST	62		2
ACTRC_DSN_DROP	BC		2
ACTRC_DSN_DROP_BYDAYSCYCLE	BC	C2	2
ACTRC_DSN_DROP_CYCLES	BC	C3	2
ACTRC_DSN_DROP_DAYS	BC	C4	2
ACTRC_DSN_DROP_DUP_GDG	BC	C7	2
ACTRC_DSN_DROP_EXTRADAYS	BC	E7	2
ACTRC_DSN_DROP_LASTREF	BC	D3	2
ACTRC_DSN_DROP_NO_MATCH	BC	D5	2
ACTRC_DSN_DROP_UNTILEXPIRED	BC	E4	2
ACTRC_DSN_DROP_VOL_RELEASED	BC	E5	2
ACTRC_DSN_DROP_WHILECATALOG	BC	E6	2
ACTRC_DSN_DSEQ	1BB		2
ACTRC_DSN_DSNAME	8		2
ACTRC_DSN_FILESEQ	1C0		2
ACTRC_DSN_JOBNAME	34		2
ACTRC_DSN_LENGTH	1C0	1C1	2
ACTRC_DSN_LOC	5A		2
ACTRC_DSN_NEW_CATLG	92		2
ACTRC_DSN_NEW_LOC	BD		2
ACTRC_DSN_NEW_MATCH	14A		2
ACTRC_DSN_NEW_MDATE	197		2
ACTRC_DSN_NEW_MJOB	177		2
ACTRC_DSN_NEW_MMASK	14B		2
ACTRC_DSN_NEW_MNAME	18F		2
ACTRC_DSN_NEW_MTYPE	14A		2
ACTRC_DSN_NEW_MTYPE_DSN	14A	C4	2
ACTRC_DSN_NEW_MTYPE_DSNSMS	14A	C3	2
ACTRC_DSN_NEW_MTYPE_MIX	14A	D4	2
ACTRC_DSN_NEW_MTYPE_SMS	14A	E2	2
ACTRC_DSN_NEW_MTYPE_VRS	14A	E5	2
ACTRC_DSN_NEW_M2DATE	1A9		2

EDGACTRC

Name	Offset	Hex Tag	Level
ACTRC_DSN_NEW_M2JOB	187		2
ACTRC_DSN_NEW_M2MASK	17F		2
ACTRC_DSN_NEW_M2NAME	1A1		2
ACTRC_DSN_NEW_RETDATE	CF		2
ACTRC_DSN_NEW_VITAL	BB		2
ACTRC_DSN_OLD_CATLG	91		2
ACTRC_DSN_OLD_MATCH	D9		2
ACTRC_DSN_OLD_MDATE	126		2
ACTRC_DSN_OLD_MJOB	106		2
ACTRC_DSN_OLD_MMASK	DA		2
ACTRC_DSN_OLD_MNAME	11E		2
ACTRC_DSN_OLD_MTYPE	D9		2
ACTRC_DSN_OLD_MTYPE_DSN	D9	C4	2
ACTRC_DSN_OLD_MTYPE_DSNSMS	D9	C3	2
ACTRC_DSN_OLD_MTYPE_MIX	D9	D4	2
ACTRC_DSN_OLD_MTYPE_SMS	D9	E2	2
ACTRC_DSN_OLD_MTYPE_VRS	D9	E5	2
ACTRC_DSN_OLD_M2DATE	138		2
ACTRC_DSN_OLD_M2JOB	116		2
ACTRC_DSN_OLD_M2MASK	10E		2
ACTRC_DSN_OLD_M2NAME	130		2
ACTRC_DSN_OLD_RETDATE	C5		2
ACTRC_DSN_OLD_VITAL	BA		2
ACTRC_DSN_SMS_MC	6A		2
ACTRC_DSN_SUBCHAIN_DROP	8F		2
ACTRC_DSN_VOL	3C		2
ACTRC_DSN_VRS_MV	72		2
ACTRC_DSN_2CYCLE	85		2
ACTRC_DSN_2SUBCHAIN_DROP	90		2
ACTRC_HDR_BACKUP	22		2
ACTRC_HDR_CATRETPD	34		2
ACTRC_HDR_CATSYNCH	2A		2
ACTRC_HDR_CATSYSID	4E		2
ACTRC_HDR_CATSYSID_NOT_SET	4E	D5	2
ACTRC_HDR_CATSYSID_SET	4E	E8	2
ACTRC_HDR_CATSYSID_SHARED	4E	5C	2
ACTRC_HDR_DATE	28		2
ACTRC_HDR_DATEFORM	29		2
ACTRC_HDR_DATEFORM_AMERICAN	29	C1	2
ACTRC_HDR_DATEFORM_EUROPEAN	29	C5	2
ACTRC_HDR_DATEFORM_ISO	29	C9	2
ACTRC_HDR_DATEFORM_JULIAN	29	D1	2
ACTRC_HDR_DSTORE	23		2
ACTRC_HDR_EXEC	22		2
ACTRC_HDR_EXPROC	24		2
ACTRC_HDR_LEN	50	4D	2
ACTRC_HDR_OPT_MOVEBY	50		2
ACTRC_HDR_OPT_MOVEBY_SET	50	E2	2
ACTRC_HDR_OPT_MOVEBY_VOLUME	50	E5	2
ACTRC_HDR_OPT_RETAINBY	4F		2
ACTRC_HDR_OPT_RETAINBY_SET	4F	E2	2
ACTRC_HDR_OPT_RETAINBY_VOLUME	4F	E5	2
ACTRC_HDR_OPT_VRSEL	43		2
ACTRC_HDR_OPT_VRSEL_NEW	43	D5	2

EDGACTRC

Name	Offset	Hex Tag	Level
ACTRC_HDR_OPT_VRSEL_OLD	43	D6	2
ACTRC_HDR_OPTIONS	32		2
ACTRC_HDR_RPTXT	25		2
ACTRC_HDR_RUN_DATE	8		2
ACTRC_HDR_RUN_TIME	12		2
ACTRC_HDR_SYSID	46		2
ACTRC_HDR_TPRACF	45		2
ACTRC_HDR_TPRACF_AUTOMATIC	45	C1	2
ACTRC_HDR_TPRACF_NONE	45	D5	2
ACTRC_HDR_TPRACF_PREDEFINED	45	D7	2
ACTRC_HDR_UNCATALOG	44		2
ACTRC_HDR_UNCATALOG_NO	44	D5	2
ACTRC_HDR_UNCATALOG_SCRATCH	44	E2	2
ACTRC_HDR_UNCATALOG_YES	44	E8	2
ACTRC_HDR_VERIFY	27		2
ACTRC_HDR_VERIFY_DATE	18		2
ACTRC_HDR_VRSCHANGE	33		2
ACTRC_HDR_VRSCHANGE_INFO	33	C9	2
ACTRC_HDR_VRSCHANGE_VERIFY	33	E5	2
ACTRC_HDR_VRSEL	26		2
ACTRC_HDR_VRSJOBNAME	32		2
ACTRC_HDR_VRSJOBNAME_FIRST	32	F1	2
ACTRC_HDR_VRSJOBNAME_SECOND	32	F2	2
ACTRC_HDR_VRSMIN_ACTION	42		2
ACTRC_HDR_VRSMIN_ACTION_FAIL	42	C6	2
ACTRC_HDR_VRSMIN_ACTION_INFO	42	C9	2
ACTRC_HDR_VRSMIN_ACTION_WARN	42	E6	2
ACTRC_HDR_VRSMIN_COUNT	38		2
ACTRC_LEN	1C5	1C1	2
ACTRC_PRE_TYPE	4		2
ACTRC_PRE_TYPE_DSN	4	C4	2
ACTRC_PRE_TYPE_HDR	4	C8	2
ACTRC_PRE_TYPE_VOL	4	E5	2
ACTRC_PREFIX	4		2
ACTRC_RDW	0		2
ACTRC_RDW_LEN	0		2
ACTRC_RDW_SEG	2		2
ACTRC_VOL_LEN	8	4	2

SMF Action Record Information: EDGSAREC

EDGSAREC maps the action record information.

Offsets						
Dec	Hex	Type	Len	Name (Dim)	Description	
0	(0)	STRUCTURE		MAREC		
START OF RMM MAREC						
0	(0)	SIGNED	4	MARECORD(0)	** EDGSAREC RECORD **	
KEY FIELD						
0	(0)	CHARACTER	56	MAKEY(0)	** ACTION RECORD KEY FIELD **	
0	(0)	CHARACTER	1	MATYPE	** ACTION RECORD RECORD TYPE **	

EDGSAREC

Offsets		Type	Len	Name (Dim)	Description
Dec	Hex				
		11.. ..11		MATYPEID	"C'C" ** ACTION RECORD ID SYMBOL **
1	(1)	CHARACTER 11.. ..1	1	MATYPE1	** **
		11.1 .1..		MATYPE1_ACTION MATYPE1_MOVE	"C'A" ** ACTION SUB-TYPE ** "C'M" ** MOVE SUB-TYPE **
2	(2)	CHARACTER	8	MAACTION	**ACTION TYPE: ONE OF ** ** MOVE, SCRATCH, RETURN, REPLACE, ** ** INIT, ERASE, NOTIFY **
10	(A)	CHARACTER	8		** RESERVED **
18	(12)	CHARACTER	8	MALOC	** SOURCE LOCATION FOR MOVE **
26	(1A)	CHARACTER	8	MADEST	** TARGET LOCATION FOR MOVE **
34	(22)	CHARACTER	22	MAPAD1	** RESERVED - BINARY ZEROS **
CONTROL INFORMATION					
56	(38)	SIGNED	2	MARECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MACRDATE	** ACTION CREATE DATE - YYYYDDD **
64	(40)		4	MACRTIME	** ACTION CREATE TIME - HHMMSST **
68	(44)	CHARACTER	8	MACRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MARCCDS	** RECORD CREATE CDS ID ** ** **
84	(54)		4	MALCDATE	** LAST CHANGE DATE - YYYYDDD **
88	(58)		4	MALCTIME	** LAST CHANGE TIME - HHMMSST **
92	(5C)	CHARACTER	8	MALCUID	** LAST CHANGE USER ID **
100	(64)	CHARACTER	8	MALCSID	** LAST CHANGE SYSTEM ID **
108	(6C)		4	MAUCDATE	** LAST "USER" CHANGE DATE **
112	(70)		4	MAUCTIME	** LAST "USER" CHANGE TIME **
FLAG BYTES					
116	(74)	BITSTRING 1... .. ..1 ..	1	MACFLG MADELFLG MASELFLG	** CONTROL FLAGS 1 ** "X'80" ** RECORD DELETED ** "X'10" ** SELECT - PROC BY SATELLITE UPDT**
117	(75)	BITSTRING	1	MARECLEV	** RECORD LEVEL NUMBER **
118	(76)	BITSTRING	6		** RESERVED **
ACTION RECORD SPECIFIC INFORMATION					
124	(7C)	SIGNED	4	MACOUNT	** COUNT OF VOLS REQ THIS ACTION **
128	(80)	BITSTRING 1... .. .1.. .. ..1.	1	MASFLAG MASCOMP MASPEND MASCONF	** STATUS OF MOVES AND ACTIONS ** "X'80" ** STATUS = COMPLETED ** "X'40" ** STATUS = PENDING ** "X'20" ** STATUS = CONFIRMED **
129	(81)	CHARACTER	7	MASUNK MARESDV	"X'10" ** STATUS = UNKNOWN ** ** RESERVED **

EDGSAREC

Offsets		Hex	Type	Len	Name (Dim)	Description
Dec						
END OF ACTION RECORD SPECIFICATION FILE RECORD						
136	(88)	SIGNED	4	MARCEND(0)	MARCLNG	** END OF MAREC ** "MARCEND-MARECORD" ** MAX LENGTH OF MARECORD ** ** **
END OF RMM MAREC						

EDGSAREC Cross Reference

Name	Offset	Hex Tag	Level
MAACTION	2		2
MACFLG	74		2
MACOUNT	7C		2
MACRDATE	3C		2
MACRSID	44		2
MACRTIME	40		2
MADEFLG	74	80	2
MADEST	1A		2
MAKEY	0		2
MALCDATE	54		2
MALCSID	64		2
MALCTIME	58		2
MALCUID	5C		2
MALOC	12		2
MAPAD1	22		2
MARCCDS	4C		2
MARCEND	88		2
MARCLNG	88	88	2
MARECLEV	75		2
MARECLN	38		2
MARECORD	0		2
MARESVD	81		2
MASCOMP	80	80	2
MASCONF	80	20	2
MASEFLG	74	10	2
MASFLAG	80		2
MASPEND	80	40	2
MASUNK	80	10	2
MATYPE	0	C3	2
MATYPEID	0	C3	2
MATYPE1	1		2
MATYPE1_ACTION	1	C1	2
MATYPE1_MOVE	1	D4	2
MAUCDATE	6C		2
MAUCTIME	70		2

SMF Data Set Information: EDGSDREC

EDGSDREC maps the data set information.

Offsets		Hex	Type	Len	Name(Dim)	Description
Dec						
0	(0)	STRUCTURE	0	MDREC		

EDGSDREC

Offsets						
Dec	Hex	Type	Len	Name(Dim)	Description	
START OF RMM MDREC						
0	(0)	SIGNED	4	MDRECORD(0)	** EDGSDREC INFORMATION **	
0	(0)	CHARACTER	56	(0)	** DSN **	
0	(0)	CHARACTER	1	MDTYPE	** DSN INFO ID: 'D' **	
		11.. .1..		MDTYPEID	"C'D" ** DSN INFO ID SYMBOL **	
1	(1)	CHARACTER	44	MDDSNNAME	** DATASET NAME **	
45	(2D)	CHARACTER	6	MDVOLSER	** VOLUME SERIAL NUMBER **	
51	(33)	BITSTRING	1		** RESERVED - BINARY ZEROS **	
52	(34)	SIGNED	2	MDDSNSEQ	** DATASET SEQUENCE NUMBER **	
54	(36)	BITSTRING	2	MDPAD1	** RESERVED - BINARY ZEROS **	
CONTROL INFORMATION						
56	(38)	SIGNED	2	MDRECLN	** RECORD LENGTH **	
58	(3A)	SIGNED	2		** RESERVED **	
60	(3C)		4	MDCRDATE	** DSN CREATE DATE - YYYYDDD **	
64	(40)		4	MDCRTIME	** DSN CREATE TIME - HHMSST **	
68	(44)	CHARACTER	8	MDCRSID	** CREATE SYSTEM ID **	
76	(4C)	CHARACTER	8	MDRCCDS	** RECORD CREATE CDS ID ** **	
84	(54)		4	MDLCDATE	** LAST CHANGE DATE - YYYYDDD **	
88	(58)		4	MDLCTIME	** LAST CHANGE TIME - HHMSST **	
92	(5C)	CHARACTER	8	MDLCUID	** LAST CHANGE USER ID **	
100	(64)	CHARACTER	8	MDLCSID	** LAST CHANGE SYSTEM ID **	
108	(6C)		4	MDUCDATE	** LAST "USER" CHANGE DATE **	
112	(70)		4	MDUCTIME	** LAST "USER" CHANGE TIME **	
CONTROL FLAGS						
116	(74)	BITSTRING	1	MDCFLG	** CONTROL FLAGS 1 **	
		1...		MDDELFLG	"X'80" ** RECORD DELETED **	
		.1..		MDPDFLFG	"X'40" ** RECORD PREVIOUSLY DELETED **	
		...1		MDSELFLG	"X'10" ** SELECT - PROC BY SATELLITE UPDT**	
		.... 1...		MDDUMMY	"X'08" ** DUMMY RECORD - ALLOW TSO ADD **	
117	(75)	BITSTRING	1	MDRECLEV	** RECORD LEVEL NUMBER	
118	(76)	BITSTRING	6		** RESERVED	
DSNAME INFORMATION						
124	(7C)	SIGNED	4	MDTOTAL_BLKs	** Total block count - across ** all volumes containing ds	
128	(80)	BITSTRING	1	MDSTART_POSN	File start media position	
129	(81)	BITSTRING	1	MDEND_POSN	File end media position	
130	(82)	SIGNED	2	MDVOLSEQ	** VOLUME SEQUENCE NUMBER **	
132	(84)	CHARACTER	4	MDUNITAD	** UNIT ADDRESS **	
136	(88)	CHARACTER	4	MDRECFM	** RECORD FORMAT **	
140	(8C)	SIGNED	4	MDLRECL	** LOGICAL RECORD LENGTH **	
144	(90)	SIGNED	4	MDBLKsZ	** PHYSICAL BLOCK SIZE **	
148	(94)	SIGNED	4	MDBLKCNT	** BLOCK COUNT **	
152	(98)	CHARACTER	8	MDOWNDSN	** DATASET OWNER **	
160	(A0)	BITSTRING	1	MDSECLEV	** SECURITY LEVEL **	

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
161	(A1)	BITSTRING	1	MDTRTCH	** FROM JFCTRCH - IDRC SUPPORT **
		.... 1...		MDTCOMP	"X'08" ** DSN USED 3480 IDRC **
		.... .1..		MDTNCOMP	"X'04" ** NO COMPACTION **
162	(A2)	BITSTRING	2	MDFILSEQ	** LOGICAL FILE SEQUENCE NO **
164	(A4)	CHARACTER	8	MDTOKEN	** RESERVED FOR RMM INTERNAL USE **
172	(AC)	SIGNED	4	MDDSSIZE	** DATASET SIZE IN KBYTES **
176	(B0)		4	MDLRDATE	** DATE LAST READ - YYYYDDD
180	(B4)		4	MDLWDATE	** DATE LAST WRITTEN - YYYYDDD
184	(B8)	BITSTRING	1	MDFLAG	** FLAG BYTE
		1...		MDFCAT	"X'80" ** DATA SET IS CATALOGED
		.1..		MDFVRSR	"X'40" ** DATA SET IS RETAINED BY VRS
		..1.		MDFNOTCAT	"X'20" ** INDICATES DS WAS FOUND NOT ** TO BE CATALOGED DURING VRS
		.... 1...		MDFABEND	"X'08" ** ABEND IN PROGRESS WHEN DATA ** SET CLOSED
		.... .1..		MDFOCEAB	"X'04" ** ABEND PROBABLY IN O/C/EOV
		.... ..1.		MDFORCE	"X'02" ** FORCE SUPPLIED
185	(B9)	BITSTRING	2		** RESERVED
187	(BB)	CHARACTER	1	MDVRSTYP	** MATCHING VRS TYPE, ONE OF: ** D-DATASET, S-SMSMC, ** V-VRSMV, M-DSN/MV
188	(BC)	CHARACTER	8	MDACSMC	** SMS MANAGEMENT CLASS NAME
		1.11 11..		MDFACSMC	"MDACSMC" ** OLD SMS MANAGEMENT CLASS NAME
196	(C4)	CHARACTER	8	MDVRSVAL	** VRS MANAGEMENT VALUE
LEVEL 1 SECTION / LEVEL 0 VARIABLE SECTION					
204	(CC)	CHARACTER	92	MDLEVOVS(0)	** LEVEL 0 VAR. LENGTH SECTION
204	(CC)	CHARACTER	88	MDLEV1SC(0)	** LEVEL 1 SECTION
204	(CC)	CHARACTER	8	MDACSSG	** SMS STORAGE GROUP NAME
212	(D4)	CHARACTER	8	MDACSSC	** SMS STORAGE CLASS NAME
220	(DC)	CHARACTER	8	MDACSDC	** SMS DATA CLASS NAME
228	(E4)	CHARACTER	8	MDCRTJBN	** CREATING JOB NMAE
236	(EC)	CHARACTER	8	MDVRSJBN	** MATCHING VRS JOB NAME MASK
244	(F4)	CHARACTER	4	MDRETDAT	** RETENTION DATE
248	(F8)	CHARACTER	8	MDSTEPNM	** CREATING STEP NAME
256	(100)	CHARACTER	8	MDDDDNAME	** CREATING DDNAME
264	(108)	CHARACTER	8	MDPVSCH	** PRIMARY VRS SUBSEQUENT ** SUBCHAIN NAME
272	(110)		4	MDPVSDTE	** PRIMARY VRS SUBSEQUENT ** SUBCHAIN START DATE
276	(114)		4	MDEXPDT	** EXPIRATION DATE
280	(118)		4	MDEXPDTO	** ORIGINAL EXPIRATION DATE
284	(11C)	CHARACTER	8		** RESERVED

EDGSDREC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
LEVEL 2 SECTION / LEVEL 1 VARIABLE SECTION					
292	(124)	CHARACTER	136	MDLEV1VS(0)	** LEVEL 1 VAR. LENGTH SECTION
292	(124)	CHARACTER	56	MDLEV2SC(0)	** LEVEL 2 SECTION
292	(124)	SIGNED	4	MDBLKIDS	** FILE START BLOCKID
296	(128)	SIGNED	4	MDBLKIDE	** FILE END BLOCKID
300	(12C)	CHARACTER	8	MDCPGM	** Creating program name
308	(134)	CHARACTER	8	MDLPGM	** Last use program name
316	(13C)	CHARACTER	8	MDLJOB	** Last use job name
324	(144)	CHARACTER	8	MDLSTEP	** Last use step name
332	(14C)	CHARACTER	8	MDLDDNM	** Last use DD name
340	(154)	CHARACTER	4	MDLDEVN	** Last use device number
344	(158)	CHARACTER	4		** Reserved
VARIABLE LENGTH SECTION					
348	(15C)	CHARACTER	164	MDVARSEC(0)	** VARIABLE LENGTH SECTION
348	(15C)	BITSTRING	1	MDPDSNL	** LENGTH OF PREVIOUS DSNAME **
349	(15D)	BITSTRING	1	MDNDSNL	** LENGTH OF NEXT DSNAME **
350	(15E)	BITSTRING	1	MDVRSNML	** LENGTH OF MATCHING VRS NAME
351	(15F)	BITSTRING	1	MD2VMTCL	** LENGTH OF SECOND. VRS FIELDS
352	(160)	CHARACTER	44	MDPDSN	** PREVIOUS DSNAME OR NULL **
396	(18C)	CHARACTER	44	MDNDSN	** NEXT DSNAME OR NULL **
440	(1B8)	CHARACTER	44	MDVRSNAM	** MATCHING VRS NAME
484	(1E4)	CHARACTER	28	MD2VMTC(0)	** SECONDARY VRS DETAILS
484	(1E4)	CHARACTER	8	MD2VNAME	** SECONDARY VRS MASK
492	(1EC)	CHARACTER	8	MD2VJBNM	** SECONDARY VRS JOB NAME MASK
500	(1F4)	CHARACTER	8	MD2VSCH	** SECONDARY VRS SUBSEQUENT ** SUBCHAIN NAME
508	(1FC)		4	MD2VSDTE	** SECONDARY VRS SUBSEQUENT ** SUBCHAIN START DATE
END OF DATA SET INFORMATION					
512	(200)	SIGNED	4	MDCREND(0)	** END OF MDREC **
512	(200)		0	MDCRLNG	"MDCREND-MDRECORD" ** MAX LENGTH OF MDRECORD ** ** **
END OF RMM MDREC					

EDGSDREC Constants

Len	Type	Value	Name	Description
1	CHARACTER	D	MDTYPEID	DSN INFO ID SYMBOL

EDGSDREC Cross Reference

Name	Offset	Hex Tag	Level
MDACSDC	DC		2
MDACSMC	BC		2

EDGSDREC

Name	Offset	Hex Tag	Level
MDACSSC	D4		2
MDACSSG	CC		2
MDBLKCNT	94		2
MDBLKIDE	128		2
MDBLKIDS	124		2
MDBLKSZ	90		2
MDCFLG	74		2
MDCPGM	12C		2
MDCRDATE	3C		2
MDCRSID	44		2
MDCRTIME	40		2
MDCRTJBN	E4		2
MDDDDNAME	100		2
MDDELFLG	74	80	2
MDDSNAME	1		2
MDDSSEQ	34		2
MDDSSIZE	AC		2
MDDUMMY	74	8	2
MDEND_POSN	81		2
MDEXPDT	114		2
MDEXPDTO	118		2
MDFABEND	B8	8	2
MDFACSMC	BC	BC	2
MDFCAT	B8	80	2
MDFILSEQ	A2		2
MDFLAG	B8		2
MDFNOTCAT	B8	20	2
MDFOCEAB	B8	4	2
MDFORCE	B8	2	2
MDFVRSR	B8	40	2
MDLCDATE	54		2
MDLCSID	64		2
MDLCTIME	58		2
MDLCUID	5C		2
MDLDDNM	14C		2
MDLDEVN	154		2
MDLEV0VS	CC		2
MDLEV1SC	CC		2
MDLEV1VS	124		2
MDLEV2SC	124		2
MDLJOB	13C		2
MDLPGM	134		2
MDLRDATE	B0		2
MDLRECL	8C		2
MDLSTEP	144		2
MDLWDATE	B4		2
MDNDSN	18C		2
MDNDSNL	15D		2
MDOWNDSN	98		2
MDPAD1	36		2
MDPDLFLG	74	40	2
MDPDSN	160		2
MDPDSNL	15C		2
MDPVSCH	108		2

EDGSDREC

Name	Offset	Hex Tag	Level
MDPVSDTE	110		2
MDRCCDS	4C		2
MDRCEND	200		2
MDRCLNG	200	200	2
MDREC	0		1
MDRECFM	88		2
MDRECLEV	75		2
MDRECLN	38		2
MDRECORD	0		2
MDRETDAT	F4		2
MDSECLEV	A0		2
MDSELFLG	74	10	2
MDSTART_POSN	80		2
MDSTEPNM	F8		2
MDTCOMP	A1	8	2
MDTNCOMP	A1	4	2
MDTOKEN	A4		2
MDTOTAL_BLKs	7C		2
MDTRTCH	A1		2
MDTYPE	0	C4	2
MDTYPEID	0	C4	2
MDUCDATE	6C		2
MDUCTIME	70		2
MDUNITAD	84		2
MDVARSEC	15C		2
MDVOLSEQ	82		2
MDVOLSER	2D		2
MDVRSJBN	EC		2
MDVRSNAM	1B8		2
MDVRSNML	15E		2
MDVRSSTYP	BB		2
MDVRSVAL	C4		2
MD2VJBNM	1EC		2
MD2VMTC	1E4		2
MD2VMTCL	15F		2
MD2VNAME	1E4		2
MD2VSCH	1F4		2
MD2VSDTE	1FC		2

SMF Vital Record Specification Information: EDGSKREC

EDGSKREC maps the vital record specification information.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		MKREC	
0	(0)	SIGNED	4	MKRECORD(0)	* EDGMKREC Record
Key					
0	(0)	CHARACTER	56	MKKEY(0)	* Key of VRS record
0	(0)	CHARACTER	1	MKTYPE	* Record Type
		11.1 ..1.		MKTYPEID	"C'K'" * VRS Record ID
1	(1)	CHARACTER	1	MKTYPE2	* VRS Type
		111. .1.1		MKTYPVOL	"C'V'" * Volume VRS
		11.1 .1.1		MKTYPNAM	"C'N'" * Name VRS

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
		11.. .1..		MKTYPDSN	"C'D" * Data set VRS
2	(2)	CHARACTER	6	MKVOLSER(0)	* Volume Serial mask
2	(2)	CHARACTER	8	MKNAME(0)	* Name of VRS
2	(2)	CHARACTER	44	MKDSNAME	* Data set name mask
46	(2E)	CHARACTER	1	MKGENKEY	* Generic/Specific indicator
		1111		MKGKSPEC	"C'0" * Specific
		1111 ...1		MKGKGEN	"C'1" * Generic
47	(2F)	CHARACTER	8	MKCRTJBN	* Job name
55	(37)	CHARACTER	1	MKPAD1	* Reserved (binary zeros)
Control Information					
56	(38)	SIGNED	2	MKRECLN	* Record length
58	(3A)	SIGNED	2		* Reserved
60	(3C)		4	MKCRDATE	* VRS create date - YYYYDDD
64	(40)		4	MKCRTIME	* VRS create time - HHMMSS
68	(44)	CHARACTER	8	MKCRSID	* Create system id
76	(4C)	CHARACTER	8	MKRCCDS	* Record create CDS id
84	(54)		4	MKLCDATE	* Last change date - YYYYDDD
88	(58)		4	MKLCTIME	* Last change time - HHMMSS
92	(5C)	CHARACTER	8	MKLCUID	* Last change user id
100	(64)	CHARACTER	8	MKLCSID	* Last change system id
108	(6C)		4	MKUCDATE	* Last "USER" change date
112	(70)		4	MKUCTIME	* Last "USER" change time
116	(74)	BITSTRING	1	MKCFLG	* Control flags 1
		1...		MKDEFLG	"X'80" * Record deleted
		...1		MKSELFLG	"X'10" * Select - proc by satellite updt
117	(75)	BITSTRING	1	MKRECLEV	* Record level number
118	(76)	BITSTRING	6		* Reserved
Retention Type					
124	(7C)	CHARACTER	1	MKRETN	* Type of retention
		1...		MKRETNC	"X'80" * Cycles
		.1..		MKRETND	"X'40" * Days
		..1.		MKRETNR	"X'20" * LastReferenceDays
		...1		MKRETNW	"X'10" * WhileCataloged
		.... 1...		MKRETNX	"X'08" * UntilExpired
		.... .1..		MKRETNXD	"X'04" * ExtraDays
		.... ..1.		MKRETNCD	"X'02" * ByDaysCycle
Data set name mask type					
125	(7D)	CHARACTER	1	MKDSNTYP	* Data set name mask type
		1...		MKDSNG	"X'80" * Generation Data Group
		.1..		MKDSNP	"X'40" * Pseudo GDG
		..1.		MKDSND	"X'20" * Standard data set name
		.... ..1.		MKOPEN	"X'02" * Mask is for open files
		.... ...1		MKABEND	"X'01" * Mask is for abended files
Store Information					
126	(7E)	CHARACTER	1	MKSTORE	* Store requirement
		111. .1.1		MKSTOREV	"C'V" * Vital record only
		11.1 1..1		MKSTORER	"C'R" * Remote store
		11.1 ..11		MKSTOREL	"C'L" * Local store
		11.. .1..		MKSTORED	"C'D" * Distant store
		11.. ..1.		MKSTOREB	"C'B" * Both: Local then Distant
127	(7F)	BITSTRING	1	MKRES1	* RESERVED

EDGSKREC

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
128	(80)	CHARACTER	8	MKLOC	* Location name - one of: * HOME, LOCAL, REMOTE, * DISTANT, CURRENT or * defined library name
VRS Control Information					
136	(88)	CHARACTER	8	MKNEXT	* Name of NEXTVRS or ANDVRS
144	(90)	SIGNED	4	MKCOUNT	* Nbr of Cycles, Days, Volumes
148	(94)	SIGNED	2	MKLPRTY	* Location Priority override
150	(96)	SIGNED	2	MKSTART	* Store start number
152	(98)	SIGNED	4	MKSTORE1	* Store keep number
156	(9C)	SIGNED	4	MKSTORE2	* Distant store keep number
160	(A0)	BITSTRING	1	MKFLAGA	* Flag-A
		1... ..		MKFGAAND	"X'80'" * MKNEXT is ANDVRS() operand
		.1.. ..		MKFGANXT	"X'40'" * MKNEXT is NEXTVRS() operand
161	(A1)	BITSTRING	1	MKRLSOPT	* Release Options
		1... ..		MKRLSXDI	"X'80'" * Expiry Date Ignore
		.1.. ..		MKRLSSCI	"X'40'" * Scratch Immediate
162	(A2)	SIGNED	2	MKDELAY	* Number of days before move
164	(A4)	CHARACTER	8	MKOWNER	* VRS owner
172	(AC)		4	MKDELDAT	* VRS delete date (YYYYDDD)
176	(B0)	CHARACTER	30	MKDESC	* Description
206	(CE)	CHARACTER	6		* Reserved
212	(D4)	SIGNED	4	MKRCEND(0)	* End of MKRECORD
		11.1 .1..		MKRCLNG	"MKRCEND-MKRECORD" * Length of MKRECORD

EDGSKREC Cross Reference

Name	Offset	Hex Tag	Level
MKABEND	7D	1	2
MKCFLG	74		2
MKCOUNT	90		2
MKCRDATE	3C		2
MKCRSID	44		2
MKCRTIME	40		2
MKCRJBN	2F		2
MKDELAY	A2		2
MKDELDAT	AC		2
MKDELFLG	74	80	2
MKDESC	B0		2
MKDSNAME	2		2
MKDSND	7D	20	2
MKDSNG	7D	80	2
MKDSNP	7D	40	2
MKDSNTYP	7D		2
MKFGAAND	A0	80	2
MKFGANXT	A0	40	2
MKFLAGA	A0		2
MKGENKEY	2E		2
MKGKGEN	2E	F1	2
MKGKSPEC	2E	F0	2

EDGSKREC

Name	Offset	Hex Tag	Level
MKKEY	0		2
MKLCDATE	54		2
MKLCSID	64		2
MKLCTIME	58		2
MKLCUID	5C		2
MKLOC	80		2
MKLPRTY	94		2
MKNAME	2		2
MKNEXT	88		2
MKOPEN	7D	2	2
MKOWNER	A4		2
MKPAD1	37		2
MKRCCDS	4C		2
MKRCEND	D4		2
MKRCLNG	D4	D4	2
MKRECLEV	75		2
MKRECLN	38		2
MKRECORD	0		2
MKRES1	7F		2
MKRETN	7C		2
MKRETNCD	7C	80	2
MKRETNCD	7C	2	2
MKRETNCD	7C	40	2
MKRETNCD	7C	20	2
MKRETNCD	7C	10	2
MKRETNCD	7C	8	2
MKRETNCD	7C	4	2
MKRLSOPT	A1		2
MKRLSSCI	A1	40	2
MKRLSXDI	A1	80	2
MKSELFLG	74	10	2
MKSTART	96		2
MKSTORE	7E		2
MKSTOREB	7E	C2	2
MKSTORED	7E	C4	2
MKSTOREL	7E	D3	2
MKSTORER	7E	D9	2
MKSTOREV	7E	E5	2
MKSTORE1	98		2
MKSTORE2	9C		2
MKTYPDSN	1	C4	2
MKTYPE	0		2
MKTYPEID	0	D2	2
MKTYPE2	1		2
MKTYPNAM	1	D5	2
MKTYPVOL	1	E5	2
MKUCDATE	6C		2
MKUCTIME	70		2
MKVOLSER	2		2

SMF Owner Information: EDGSOREC

EDGSOREC maps the owner information.

EDGSOREC

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		MOREC	
START OF RMM MOREC					
0	(0)	SIGNED	4	MORECORD(0)	** EDGSOREC INFORMATION **
0	(0)	CHARACTER	56	(0)	** **
0	(0)	CHARACTER	1	MOTYPE	** OWNER INFO ID: 'O' **
		11.1 .11.		MOTYPEID	"C'O" ** OWNER INFO ID SYMBOL **
1	(1)	CHARACTER	8	MOOWNER	** OWNER ID **
9	(9)	CHARACTER	6	MORTYPE	** OWNER INFO TYPE: ZEROS - OWNER DETAILS VOLSER - VOLUME/OWNER INFORMTN ONES - END OF VOLUME/OWNER **
15	(F)	CHARACTER	41	MOPAD1	** RESERVED - BINARY ZEROS **
CONTROL INFORMATION					
56	(38)	SIGNED	2	MORECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MOCRDATE	** OWNR CREATE DATE - YYYYDDD **
64	(40)		4	MOCRTIME	** OWNR CREATE TIME - HHMSST **
68	(44)	CHARACTER	8	MOCRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MORCCDS	** RECORD CREATE CDS ID ** **
84	(54)		4	MOLCDATE	** LAST CHANGE DATE - YYYYDDD **
88	(58)		4	MOLCTIME	** LAST CHANGE TIME - HHMSST **
92	(5C)	CHARACTER	8	MOLCUID	** LAST CHANGE USER ID **
100	(64)	CHARACTER	8	MOLCSID	** LAST CHANGE SYSTEM ID **
108	(6C)		4	MOUCDATE	** LAST "USER" CHANGE DATE **
112	(70)		4	MOUCTIME	** LAST "USER" CHANGE TIME **
CONTROL FLAGS					
116	(74)	BITSTRING	1	MOCFLG	** CONTROL FLAGS 1 **
		1... ..		MODELFLG	"X'80'" ** RECORD DELETED **
		...1 ...		MOSELFGL	"X'10'" ** SELECT - PROC BY SATELLITE UPDT**
		.... 1...		MODUMMY	"X'08'" ** DUMMY RECORD - ALLOW TSO ADD **
117	(75)	BITSTRING	7		** RESERVED **
OWNER DETAILS					
124	(7C)	SIGNED	4	(0)	** ENSURE AREA F-WORD ALIGNED **
124	(7C)	CHARACTER	248	MOOWNDET(0)	** OWNER DETAILS **
124	(7C)	CHARACTER	20	MOOWNSUR	** OWNER SURNAME **
144	(90)	CHARACTER	20	MOOWNFST	** OWNER FIRST NAME **
164	(A4)	CHARACTER	40	MOOWNDEP	** OWNER DEPARTMENT **
204	(CC)	CHARACTER	40	MOOWNAD1	** OWNER ADDRESS LINE 1 **
244	(F4)	CHARACTER	40	MOOWNAD2	** OWNER ADDRESS LINE 2 **
284	(11C)	CHARACTER	40	MOOWNAD3	** OWNER ADDRESS LINE 3 **
324	(144)	CHARACTER	8	MOOWNTIN	** OWNER INTERNAL TELEPHONE NO **
332	(14C)	CHARACTER	20	MOOWNTEX	** OWNER EXTERNAL TELEPHONE NO **

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
352	(160)	CHARACTER	8	MOOWNUID	** OWNER USERID **
360	(168)	CHARACTER	8	MOOWNNOD	** OWNER NODENAME **
368	(170)	SIGNED	4	MOOWNVOL	** TOTAL NUMBER OF OWNED VOLUMES **
372	(174)	SIGNED	4	MOODETND(0)	** END OF OWNER DETAILS **
OWNED VOLUME DETAILS					
	.11. .1..			MOMXVOLS	"100" ** DEFINE THE MAXIMUM NUMBER ** OF VOLUMES IN VOLUME/OWNER INFORMATION **
124	(7C)	CHARACTER		MOVOLDET(0)	** VOLUME DETAILS **
124	(7C)	SIGNED	2	MOVOLNO	** OWNED VOLS THIS INFORMATION **
126	(7E)	BITSTRING	2		** RESERVED **
OWNED VOLUME ENTRY					
128	(80)	CHARACTER	16	MOVOLENT(0)	** VOLUME ENTRY **
128	(80)	CHARACTER	6	MOVOLSER	** VOLUME SERIAL **
134	(86)	BITSTRING	2		** RESERVED **
136	(88)	CHARACTER	8	MOUNIT	** UNIT TYPE **
144	(90)	SIGNED	4	MOVOLENZ(0)	** ENTRY END MARKER **
144	(90)	CHARACTER		(0)	** AREA FOR REM. ENTRIES **
1728	(6C0)	SIGNED	4	MOVDETND(0)	** END OF VOLUME DETAILS **
CHECKS THAT EXPLICIT AREA LENGTHS MATCH SUM OF SUB-AREA DEFINED. LENGTH OF MOOWNDET MUST MATCH VALUE MOODETND-MOOWNDET. LENGTH OF MOVOLDET MUST MATCH VALUE MOVDETND-MOVOLDET. LENGTH OF MOVOLENT MUST MATCH VALUE MOVOLENZ-MOVOLENT. IF ANY OF THE CONDITIONS ARE NOT MET, ONE OF THE FOLLOWING 6 LA INSTRUCTIONS WILL FAIL WITH AN ASSEMBLY ERROR. LENGTH OF MOVOLENT MUST MATCH VALUE MOVOLENZ-MOVOLENT.					
END OF LENGTH CHECK INSTRUCTIONS					
END OF OWNER INFORMATION					
1728	(6C0)	SIGNED	4	MORCEND(0)	** END OF MOREC **
1728	(6C0)			MORCLNG	"MORCEND-MORECORD" ** MAX LENGTH OF MORECORD ** ** **
END OF RMM MOREC					

EDGSOREC Cross Reference

Name	Offset	Hex Tag	Level
MOCFLG	74		2
MOCRDATE	3C		2
MOCRSID	44		2
MOCRTIME	40		2
MODELFLG	74	80	2
MODUMMY	74	8	2
MOLCDATE	54		2
MOLCSID	64		2
MOLCTIME	58		2
MOLCUID	5C		2
MOMXVOLS	174	64	2
MOODETND	174		2
MOOWNAD1	CC		2
MOOWNAD2	F4		2

EDGSOREC

Name	Offset	Hex Tag	Level
MOOWNAD3	11C		2
MOOWNDEP	A4		2
MOOWNDET	7C		2
MOOWNER	1		2
MOOWNFST	90		2
MOOWNNOD	168		2
MOOWNSUR	7C		2
MOOWNTEX	14C		2
MOOWNTIN	144		2
MOOWNUID	160		2
MOOWNVOL	170		2
MOPAD1	F		2
MORCCDS	4C		2
MORCEND	6C0		2
MORCLNG	6C0	6C0	2
MORECLN	38		2
MORECORD	0		2
MORTYPE	9		2
MOSELFLG	74	10	2
MOTYPE	0		2
MOTYPEID	0	D6	2
MOUCDATE	6C		2
MOUCTIME	70		2
MOUNIT	88		2
MOVDETND	6C0		2
MOVOLDDET	7C		2
MOVOLENT	80		2
MOVOLENZ	90		2
MOVOLNO	7C		2
MOVOLSER	80		2

SMF Software Product Information: EDGSPREC

EDGSPREC maps the software product information.

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		MPREC	
START OF RMM MPREC					
0	(0)	SIGNED	4	MPRECORD(0)	** EDGSPREC INFORMATION **
0	(0)	CHARACTER	56	(0)	** **
0	(0)	CHARACTER	1	MPTYPE	** PP INFO ID: 'P' **
		11.1 .111		MPTYPEID	"C'P'" ** PP INFO ID SYMBOL **
1	(1)	CHARACTER	8	MPPPNUM	** PP NUMBER (NNNN-CCC) **
9	(9)	CHARACTER	6	MPVER	** VERSION/RELEASE/MOD NUMBER **
15	(F)	CHARACTER	41	MPPAD1	** RESERVED - BINARY ZEROS **
CONTROL INFORMATION					
56	(38)	SIGNED	2	MPRECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MPCRDATE	** PP CREATE DATE - YYYYDDD **
64	(40)		4	MPCRTIME	** PP CREATE TIME - HHMMSS **

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
68	(44)	CHARACTER	8	MPCRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MPRCDDS	** RECORD CREATE CDS ID ** **
84	(54)		4	MPLCDATE	** LAST CHANGE DATE - YYYYDDD **
88	(58)		4	MPLCTIME	** LAST CHANGE TIME - HHMMSST **
92	(5C)	CHARACTER	8	MPLCUID	** LAST CHANGE USER ID **
100	(64)	CHARACTER	8	MPLCSID	** LAST CHANGE SYSTEM ID **
108	(6C)		4	MPUCDATE	** LAST "USER" CHANGE DATE **
112	(70)		4	MPUCTIME	** LAST "USER" CHANGE TIME **
CONTROL FLAGS					
116	(74)	BITSTRING	1	MPCFLG	** CONTROL FLAGS 1 **
		1... ..		MPDELFLG	"X'80'" ** RECORD DELETED **
		...1 ..		MPSELFLG	"X'10'" ** SELECT - PROC BY SATELLITE UPDT**
		.... 1...		MPDUMMY	"X'08'" ** DUMMY RECORD - ALLOW TSO ADD **
117	(75)	BITSTRING	7		** RESERVED **
PROGRAM PRODUCT DETAILS					
124	(7C)	CHARACTER	8	MPPPOWN	** PROGRAM PRODUCT OWNER ID **
132	(84)	CHARACTER	30	MPPPNAME	** PROGRAM PRODUCT NAME **
162	(A2)	CHARACTER	30	MPPPDESC	** PROGRAM PRODUCT DESCRIPTION **
192	(C0)	BITSTRING	64		** RESERVED **
PROGRAM PRODUCT VOLUME DETAILS					
256	(100)	CHARACTER	8164	MPVOLDET(0)	** VOLUME DETAILS **
256	(100)	SIGNED	2	MPVOLNO	** NO OF PP VOLS **
		1111 1111		MPVOLMAX	"255" ** MAX NUMBER OF PP VOLS **
258	(102)	BITSTRING	2		** RESERVED **
PROGRAM PRODUCT VOLUME ENTRY					
260	(104)	CHARACTER	32	MPVOLENT(0)	** VOLUME ENTRY **
260	(104)	CHARACTER	6	MPVOLSER	** VOLUME SERIAL **
266	(10A)	CHARACTER	6	MPRACK	** RACK NUMBER **
272	(110)	CHARACTER	4	MPFEAT	** FEATURE CODE **
276	(114)	CHARACTER	8	MPUNIT	** UNIT TYPE **
284	(11C)	CHARACTER	8		** RESERVED **
292	(124)	CHARACTER	32	(254)	** RESERVED FOR REMAINING ENTRIES **
END OF PROGRAM PRODUCT INFORMATION					
8420	(20E4)	SIGNED	4	MPRCEND(0)	** END OF MPREC **
8420	(20E4)			MPRCLNG	"MPRCEND-MPRECORD" ** MAX LENGTH OF MPRECORD ** ** **
END OF RMM MPREC					

EDGSPREC Cross Reference

Name	Hex Offset	Hex Value	Level
MPCFLG	74		2
MPCRDATE	3C		2

EDGSPREC

Name	Hex Offset	Hex Value	Level
MPCRSID	44		2
MPCRTIME	40		2
MPDELFLG	74	80	2
MPDUMMY	74	8	2
MPFEAT	110		2
MPLCDATE	54		2
MPLCSID	64		2
MPLCTIME	58		2
MPLCUID	5C		2
MPPAD1	F		2
MPPPDESC	A2		2
MPPPNAME	84		2
MPPPNUM	1		2
MPPPOWN	7C		2
MPRACK	10A		2
MPRCCDS	4C		2
MPRCEND	20E4		2
MPRCLNG	20E4	20E4	2
MPRECLN	38		2
MPRECORD	0		2
MPSELFLG	74	10	2
MPTYPE	0		2
MPTYPEID	0	D7	2
MPUCDATE	6C		2
MPUCTIME	70		2
MPUNIT	114		2
MPVER	9		2
MPVOLDET	100		2
MPVOLENT	104		2
MPVOLMAX	100	FF	2
MPVOLNO	100		2
MPVOLSER	104		2

SMF Library Shelf Location Information: EDGSRREC

EDGSRREC maps the library shelf location information.

Offsets		Type	Len	Name (Dim)	Description
Dec	Hex				
0	(0)	STRUCTURE		MRREC	
START OF RMM MRREC					
0	(0)	SIGNED	4	MRRECORD(0)	** EDGSRREC INFORMATION **
0	(0)	CHARACTER	56	(0)	** **
0	(0)	CHARACTER	1	MRTYPE	** RACK INFO ID: **
		11.. .1.1		MRTYPEE	"C'E" ** 'E' - EMPTY RACK **
		11.. .11.		MRTYPEF	"C'F" ** 'F' - FREE/SCRATCH RACK **
		111. .1..		MRTYPEU	"C'U" ** 'U' - IN USE RACK **
1	(1)	BITSTRING	1		** RESERVED **
2	(2)	CHARACTER	8	MRMEDIA	** MEDIA NAME **
		.... ..1.		MRUNIT	"MRMEDIA,8" UNIT TYPE
10	(A)	CHARACTER	6	MRRACK	**RACK NUMBER **
16	(10)	BITSTRING	40	MRPAD1	** RESERVED BINARY ZEROS**

CONTROL INFORMATION

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
56	(38)	SIGNED	2	MRRECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MRCRDATE	** RACK CREATE DATE - YYYYDDD **
64	(40)		4	MRCRTIME	** RACK CREATE TIME - HHMMSST **
68	(44)	CHARACTER	8	MRCRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MRRCCDS	** RECORD CREATE CDS ID ** ** **
84	(54)		4	MRLCDATE	** LAST CHANGE DATE - YYYYDDD **
88	(58)		4	MRLCTIME	** LAST CHANGE TIME - HHMMSST **
92	(5C)	CHARACTER	8	MRLCUID	** LAST CHANGE USER ID **
100	(64)	CHARACTER	8	MRLCSID	** LAST CHANGE SYSTEM ID **
108	(6C)		4	MRUCDATE	** LAST "USER" CHANGE DATE **
112	(70)		4	MRUCTIME	** LAST "USER" CHANGE TIME **
FLAG BYTES					
116	(74)	BITSTRING	1	MRCFLG	** CONTROL FLAGS 1 **
		1... ..		MRDELFLG	"X'80'" ** RECORD DELETED **
		...1 ...		MRSELFGL	"X'10'" ** SELECT - PROC BY SATELLITE UPDT**
		.... 1...		MRDUMMY	"X'08'" ** DUMMY RECORD - ALLOW TSO ADD **
117	(75)	BITSTRING	7		** RESERVED **
RACK INFORMATION					
124	(7C)	CHARACTER	6	MRVOLSER	** ASSIGNED VOLSER OR ZEROS ** ** **
130	(82)	CHARACTER	10		** RESERVED **
END OF RACK INFORMATION					
140	(8C)	SIGNED	4	MRRCEND(0) MRRCLNG	** END OF MRRC ** "MRRCEND-MRRECORD" ** MAX LENGTH OF MRRECORD ** ** **
END OF RMM MRREC					

EDGSRREC Cross Reference

Name	Offset	Hex Tag	Level
MRCFLG	74		2
MRCRDATE	3C		2
MRCRSID	44		2
MRCRTIME	40		2
MRDELFLG	74	80	2
MRDUMMY	74	8	2
MRLCDATE	54		2
MRLCSID	64		2
MRLCTIME	58		2
MRLCUID	5C		2
MRMEDIA	2		2
MRPAD1	10	0	2
MRRACK	A		2
MRRCCDS	4C		2
MRRCEND	8C		2

EDGSRREC

Name	Offset	Hex Tag	Level
MRRCLNG	8C	8C	2
MRRECLN	38		2
MRRECORD	0		2
MSSELFGL	74	10	2
MRTYPE	0		2
MRTYPEE	0	C5	2
MRTYPEF	0	C6	2
MRTYPEU	0	E4	2
MRUCDATE	6C		2
MRUCTIME	70		2
MRUNIT	2	2	2
MRVOLSER	7C		2

SMF Storage Location Shelf Location Information: EDGSSREC

EDGSSREC maps the storage location bin information.

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
0	(0)	STRUCTURE	0	MSREC	
START OF RMM MSREC					
0	(0)	SIGNED	4	MSRECORD(0)	** EDGSSREC INFORMATION **
0	(0)	CHARACTER	56	(0)	** **
0	(0)	CHARACTER	1	MSTYPE	** STORE INFO ID: **
		11.1 1..1		MSTYPER	"C'R" ** 'R' - EMPTY BIN **
		11.1 ..1.		MSTYPES	"C'S" ** 'S' - ASSIGNED BIN **
1	(1)	CHARACTER	1	MSRMSTID	** REMOTE STORE ID: **
		11.. .1..		MSSTIDD	"C'D" ** 'D' - DISTANT STORE **
		11.1 ..11		MSSTIDL	"C'L" ** 'L' - LOCAL STORE **
		11.1 1..1		MSSTIDR	"C'R" ** 'R' - REMOTE STORE **
		11.1 .1..		MSSTIDU	"C'U" ** 'U' - USER DEFINED STORE
2	(2)	BITSTRING	8	MSSRSVD1	** RESERVED **
10	(A)	CHARACTER	6	MSBINNO	** BIN NUMBER **
16	(10)	BITSTRING	40	MSPAD1	** RESERVED - BINARY ZEROS **
56	(38)	CHARACTER	8	MSUSTNAM	** INSTALLATION DEFINED STORE ** NAME
64	(40)	CHARACTER	8	MSUMEDNM	** INSTALLATION DEFINED STORE ** BIN MEDIA NAME
72	(48)	CHARACTER	6	MSUBINNO	** INSTALLATION DEFINED STORE ** BIN NUMBER
CONTROL INFORMATION					
78	(4E)	SIGNED	2	MSRECLN	** RECORD LENGTH **
80	(50)	SIGNED	2		** RESERVED **
82	(52)		4	MSCRDATE	** CREATE DATE - YYYYDDD **
86	(56)		4	MSCRTIME	** CREATE TIME - HHMMSS **
90	(5A)	CHARACTER	8	MSCRSID	** CREATE SYSTEM ID **
98	(62)	CHARACTER	8	MSRCCDS	** RECORD CREATE CDS ID ** **
106	(6A)		4	MSLCDATE	** LAST CHANGE DATE - YYYYDDD **
110	(6E)		4	MSLCTIME	** LAST CHANGE TIME - HHMMSS **
114	(72)	CHARACTER	8	MSLCUID	** LAST CHANGE USER ID **

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
122	(7A)	CHARACTER	8	MSLCSID	** LAST CHANGE SYSTEM ID **
130	(82)		4	MSUCDATE	** LAST "USER" CHANGE DATE **
134	(86)		4	MSUCTIME	** LAST "USER" CHANGE TIME **
FLAG BYTES					
138	(8A)	BITSTRING	1	MSCFLG	** CONTROL FLAGS 1 **
		1... ..		MSDELFLG	"X'80'" ** RECORD DELETED **
		...1 ..		MSSELFLG	"X'10'" ** SELECT - PROC BY SATELLITE UPDT**
		... 1..		MSDUMMY	"X'08'" ** DUMMY RECORD - ALLOW TSO ADD **
139	(8B)	BITSTRING	7		** RESERVED **
STORE INFORMATION					
146	(92)	CHARACTER	6	MSVOLSER	** ASSIGNED VOLSER OR ZEROS ** ** * * *
152	(98)	CHARACTER	10		** RESERVED **
END OF DISASTER STORE BIN INFORMATION					
164	(A4)	SIGNED	4	MSRCEND(0) MSRCLNG	** END OF MSRC ** "MSRCEND-MSRECORD" ** MAX LENGTH OF MSRECORD ** * * *
END OF RMM MSREC					

EDGSSREC Cross Reference

Name	Offset	Hex Tag	Level
MSBINNO	A		2
MSCFLG	8A		2
MSCRDATE	52		2
MSCRSID	5A		2
MSCRTIME	56		2
MSDELFLG	8A	80	2
MSDUMMY	8A	8	2
MSLCDATE	6A		2
MSLCSID	7A		2
MSLCTIME	6E		2
MSLCUID	72		2
MSPAD1	10	0	2
MSRCCDS	62		2
MSRCEND	A4		2
MSRCLNG	A4	A4	2
MSREC	0		1
MSRECLN	4E		2
MSRECORD	0		2
MSRMSTID	1		2
MSSELFLG	8A	10	2
MSSRSVD1	2	0	2
MSSTIDD	1	C4	2
MSSTIDL	1	D3	2
MSSTIDR	1	D9	2
MSSTIDU	1	E4	2
MSTYPE	0		2
MSTYPER	0	D9	2
MSTYPES	0	E2	2

EDGSSREC

Name	Offset	Hex Tag	Level
MSUBINNO	48		2
MSUCDATE	82		2
MSUCTIME	86		2
MSUMEDNM	40		2
MSUSTNAM	38		2
MSVOLSER	92		2

SMF Volume Information: EDGSVREC

EDGSVREC maps the volume information.

Offsets		Type	Len	Name(Dim)	Description
Dec	Hex				
0	(0)	STRUCTURE	0	MVREC	
START OF RMM MVREC					
0	(0)	SIGNED	4	MVRECORD(0)	** EDGSVREC INFORMATION **
0	(0)	CHARACTER	56	MVKEY(0)	** **
0	(0)	CHARACTER	1	MVTYPE	** 'V' - VOLUME INFO TYPE **
		111. .1.1		MVTYPEID	"C'V'" ** VOLUME INFO ID SYMBOL **
1	(1)	BITSTRING	1		** RESERVED **
2	(2)	CHARACTER	6	MVVOLSER	** VOLUME SERIAL NUMBER **
8	(8)	BITSTRING	48	MVPAD1	** RESERVED - BINARY ZEROS **
CONTROL INFORMATION					
56	(38)	SIGNED	2	MVRECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MVCRDATE	** VOL CREATE DATE - YYYYDDD **
64	(40)		4	MVCRTIME	** VOL CREATE TIME - HHMSST **
68	(44)	CHARACTER	8	MVCRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MVRCDDS	** RECORD CREATE CDS ID ** **
84	(54)		4	MVLCDATE	** LAST CHANGE DATE - YYYYDDD **
88	(58)		4	MVLCTIME	** LAST CHANGE TIME - HHMSST **
92	(5C)	CHARACTER	8	MVLCUID	** LAST CHANGE USER ID **
100	(64)	CHARACTER	8	MVLCSID	** LAST CHANGE SYSTEM ID **
108	(6C)		4	MVUCDATE	** LAST "USER" CHANGE DATE **
112	(70)		4	MVUCTIME	** LAST "USER" CHANGE TIME **
FLAG BYTES					
116	(74)	BITSTRING	1	MVCFLG	** CONTROL FLAGS 1 **
		1...		MVDELFLG	"X'80'" ** RECORD DELETED **
		...1		MVSELFLG	"X'10'" ** SELECT - PROC BY SATELLITE UPDT**
		.... 1...		MVDUMMY	"X'08'" ** DUMMY RECORD - ALLOW TSO ADD **
117	(75)	BITSTRING	1	MVRECLEV	** RECORD LEVEL NUMBER
118	(76)	BITSTRING	6		** RESERVED ** **
VOLUME INFORMATION					
124	(7C)		4	MVEXPDTO	** EXPIRATION DATE - ORIGINAL ** ** **
128	(80)		4	MVEXPDT	** EXPIRATION DATE - YYYYDDD ** ** **

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
132	(84)	BITSTRING	1	MVRDEN	** COPY OF JFCBDEN **
133	(85)	CHARACTER	1	MVDEN	** RECORDING DENSITY: **
		1111 ..11		MVDEN3	"C'3'" ** '3' - 1600BPI **
		1111 .1..		MVDEN4	"C'4'" ** '4' - 6250BPI **
		1111 1..1		MVDEN9	"C'9'" ** '9' - 3480 **
		11.. ..11		MVDENC	"C'C'" ** 'C' - 3480 COMPACTED (IDRC) **
		.1.1 11..		MVDENU	"C'*'" ** '*' - UNDEFINED ** ** **
134	(86)	SIGNED	2	MVDSNNO	** NUMBER OF DATASETS ON VOLUME **
136	(88)	SIGNED	4	MVTUSE	** TAPE USAGE IN KBYTES **
140	(8C)	SIGNED	2	MVUSE	** VOLUME USE COUNT ** ** **
142	(8E)	BITSTRING	1	MVSTSTAT	** STORE STATUS: **
		.... ...1		MVSTS001	"X'01'" ** 1 - TAPE LIB TO REMOTE STORE **
		.... ..1.		MVSTS002	"X'02'" ** 2 - REMOTE STORE TO TAPE LIB **
		.... ..11		MVSTS003	"X'03'" ** 3 - TAPE LIB TO LOCAL STORE **
		.... .1..		MVSTS004	"X'04'" ** 4 - LOCAL STORE TO TAPE LIB **
		.... .1.1		MVSTS005	"X'05'" ** 5 - LOCAL STORE TO DISTANT **
		.... .11.		MVSTS006	"X'06'" ** 6 - TAPE LIB TO DISTANT STORE **
		.... .111		MVSTS007	"X'07'" ** 7 - DISTANT STORE TO TAPE LIB **
		.... 1..1		MVSTS009	"X'09'" ** 9 - STORE LOCATION VALID ** ** **
143	(8F)	BITSTRING	1	MVRSREL	** VRS RELEASE OPTIONS
		1...		MVVRFXDI	"X'80'" ** EXPIRY DATE IGNORE
		.1..		MVVRFSCI	"X'40'" ** SCRATCH IMMEDIATE
FLAG BITS IN MVRSREL SHOULD MATCH MKRLSOPT BIT SETTINGS.					
144	(90)	SIGNED	2	MVLABNO1	** LABEL NUMBER OF 1ST FILE **
146	(92)	BITSTRING	4	MVTDSI(0)	** TAPE MEDIA TYPE INFORMATION
146	(92)	BITSTRING	1	MVMEDREC	** VOL RECORDING FORMAT. ONE OF: ** X'00' - NON CARTRIDGE ** X'01' - 18TRACK ** X'02' - 36TRACK ** X'03' - 128TRACK ** X'04' - 256TRACK ** X'05' - 384TRACK
147	(93)	BITSTRING	1	MVMEDTY	** TAPE MEDIA TYPE. ONE OF: ** X'00' - NON CARTRIDGE ** X'01' - CST ** X'02' - ECCST ** X'03' - HPCT ** X'04' - EHPCT
148	(94)	BITSTRING	1	MVMEDCMP	** TAPE COMPACTION. ONE OF: ** X'00' - UNKNOWN ** X'01' - NOT COMPACTED ** X'02' - COMPACTED.
149	(95)	BITSTRING	1	MVMEDATR	** TAPE SPECIAL ATTRIBUTES. ONE OF: ** X'00' - NONE ** X'01' - 18 TRACK READ ONLY ** **
150	(96)	CHARACTER	1	MVSTORID	** STORE LOCATION ID: **

EDGSVREC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
		11.. .1..		MVSTIDD	"C'D" ** D - DISTANT STORE **
		11.1 ..11		MVSTIDL	"C'L" ** L - LOCAL STORE **
		11.1 1..1		MVSTIDR	"C'R" ** R - REMOTE STORE **
		111. ..11		MVSTIDT	"C'T" ** T - TAPE LIBRARY **
151	(97)	CHARACTER	1	MVNSTRID	** NEW STORE LOCATION ** ** **
152	(98)	CHARACTER	8	MVNLOC	** DESIRED LOCATION NAME ** **
160	(A0)	SIGNED	4	MVSTBIN	** STORE BIN NUMBER **
164	(A4)	SIGNED	4	MVOBIN	** OLD BIN NUMBER **
168	(A8)		4	MVSTDATE	** DATE STORED (YYYYDDD) **
172	(AC)	CHARACTER	4	MVLUDEV	** LAST USED DEVICE
176	(B0)	CHARACTER	8	MVLONLOC	** LOAN LOCATION **
184	(B8)	CHARACTER	8	MVOLNLOC	** OLD LOAN LOCATION ** ** **
192	(C0)		4	MVLRDDAT	** DATE VOLUME LAST READ (YYYYDDD)**
196	(C4)		4	MVLWTDAT	** DATE VOLUME LAST WRITTEN **
200	(C8)	CHARACTER	8	MVASDATM	** ASSIGNED DATE AND TIME **
		11.. 1...		MVASDATE	"MVASDATM,4" ** ASSIGNED DATE (YYYYDDD) **
		11.. 11..		MVASTIME	"MVASDATM+4,4" ** ASSIGNED TIME (HHMMSS) **
208	(D0)	CHARACTER	8	MVOWNID	** VOLUME OWNER USERID **
216	(D8)	CHARACTER	8	MVCRUID	** CREATING USERID **
224	(E0)	CHARACTER	8	MVCRJOB	** CREATING JOBNAME **
232	(E8)	BITSTRING	1	MVSECLEV	** SECURITY CLASSIFICATION LEVEL ** ** **
233	(E9)	BITSTRING	1	MVFLGAX	** FLAGS 'A' - STATUS EXTENSION ** ** **
		1...		MVGVCFGL	"X'80" ** SCRATCH VOL CLAIMED VIA GETVOL ** ** **
		.1..		MVXINFLG	"X'40" ** SCRATCH VOLUME HAS NEVER ** BEEN INITIALISED
		..1.		MVINIFLG	"X'20" ** SCRATCH VOLUME WITH INIT ** ACTION PENDING
		...1		MVENTFLG	"X'10" ** SCRATCH VOLUME WAITING TO ** ENTER ATL
		.... 1...		MVFABEND	"X'08" ** ABEND IN PROCESS WHEN A DATA ** SET CLOSED
		.... .1..		MVFOCEAB	"X'04" ** ABEND PROBABLY IN O/C/EOV **
		.... ..1.		MVATIFLG	"X'02" ** INIT REQUESTED FOR ATL VOL ** **
		.... ...1		MVFORCE	"X'01" ** FORCE SUPPLIED **
234	(EA)	SIGNED	2	MVVOLSEQ	** VOLUME SEQUENCE NUMBER ** ** **
VOLUME FLAGS					
236	(EC)	BITSTRING	1	MVFLGA	** FLAGS 'A' - STATUS **
		1...		MVMSTFLG	"X'80" ** VOLUME IS MASTER **
		.1..		MVRLSFLG	"X'40" ** VOLUME PENDING RELEASE **
		..1.		MVVRFLG	"X'20" ** VITAL RECORD - DO NOT RELEASE **
		...1		MVASSFLG	"X'10" ** USER TAPE (ASSIGNED BY LIB) **

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
		.... 1...		MVLONFLG	"X'08'" ** TAPE IS ON LOAN **
		.... .1..		MVOPNFLG	"X'04'" ** TAPE OPENED AND NOT YET CLOSED **
		.... ..1.		MVSCRFLG	"X'02'" ** VOLUME IS SCRATCH **
		.... ...1		MVOCEFLG	"X'01'" ** VOLUME RECORDED BY O/C/EOV **
		.... ...1		MVEXRFLG	"MVOCEFLG" ** STV RECORDED BY EXPORT
237	(ED)	BITSTRING	1	MVFLGB	** FLAGS 'B' **
		1...		MVDEFRET	"X'80'" ** DEFAULT RETENTION PERIOD USED **
		.1..		MVPPTAPE	"X'40'" ** PROGRAM PRODUCT TAPE **
		..1.		MVNLTAPE	"X'20'" ** LABEL TYPE IS NL **
		...1		MVALTAPE	"X'10'" ** LABEL TYPE IS AL **
		.... 1...		MVSLTAPE	"X'08'" ** LABEL TYPE IS SL **
		.... ..1.		MVBLTAPE	"X'02'" ** TAPE LAST WRITTEN USING BLP **
		.... ...1		MVULTAPE	"X'01'" ** SL OR AL TAPE HAS USER LABELS **
238	(EE)	BITSTRING	1	MVFLGC	** FLAGS 'C' - RELEASE ACTIONS **
		1...		MVRETSCR	"X'80'" ** RETURN TO SCRATCH POOL -DEFAULT**
		.111 1111		MVRELACT	"255-X'80'" ** RELEASE ACTIONS
		.1..		MVREPREL	"X'40'" ** REPLACE TAPE ON RELEASE **
		..1.		MVREINIT	"X'20'" ** REINITIALISE **
		...1		MVDEGAUS	"X'10'" ** DEGAUS/SECURITY ERASE **
		.... 1...		MVROWNER	"X'08'" ** RETURN TO OWNER **
		.... .1..		MVNOWNER	"X'04'" ** NOTIFY OWNER **
239	(EF)	BITSTRING	1	MVFLGD	** FLAGS 'D' - ACCESS **
		1...		MVOREAD	"X'80'" ** OWNER MAY READ VOLUME **
		.1..		MVOUPD	"X'40'" ** OWNER MAY UPDATE VOLUME **
		..1.		MVOALT	"X'20'" ** OWNER MAY ALTER VOLUME **
		...1		MVPROTR	"X'10'" ** READ-ONLY PROTECTION **
		.... 1...		MVPROTU	"X'08'" ** UPDATE PROTECTION **
		.... .1..		MVMVSUSE	"X'04'" ** MAY BE USED ON MVS SYSTEMS **
		.... ..1.		MVMVUSE	"X'02'" ** MAY BE USED ON VM SYSTEMS **
		.... ...1		MVNODSNR	"X'01'" ** ONLY 1ST TAPE DS RECORDED
240	(F0)	BITSTRING	1	MVFLGE	** FLAGS 'E' - ACTIONS PENDING ** ** VALUES FOR THIS FLAG ARE ** ** IDENTICAL TO THOSE FOR MVFLGC, ** ** THE RELEASE ACTIONS FLAG **
241	(F1)	BITSTRING	1	MVLTYP	** COPY OF JFCBLTYP **

EDGSVREC

Offsets			Len	Name(Dim)	Description
Dec	Hex	Type			
242	(F2)	BITSTRING	2	MVALVERS	** ANSI LABEL VERSIONS IN BINARY
		1111 ..1.		MVALCUR	"MVALVERS,1" ** CURRENT LABEL VERSION
		1111 ..11		MVALREQ	"MVALVERS+1,1" ** REQUIRED LABEL VERSION
244	(F4)	CHARACTER	8	MVMEDIA	** INSTALLATIONS MEDIA NAME
		1111 .1..		MVUNIT	"MVMEDIA,8" ** UNIT TYPE
252	(FC)	CHARACTER	6	MVRACK	** RACK NUMBER **
258	(102)	CHARACTER	6	MVPVOL	** PREVIOUS VOLSER IF MULTI-VOL **
264	(108)	CHARACTER	6	MVNVOL	** NEXT VOLSER IF MULTI-VOL **
270	(10E)	BITSTRING	4	MVUCBTYP	** COPY OF UCBTYP FIELD FROM UCB
274	(112)	CHARACTER	8	MVERRCNT(0)	** ERROR COUNTS **
274	(112)	SIGNED	2	MVTRERR	** TEMPORARY READ ERRORS **
276	(114)	SIGNED	2	MVTWERR	** TEMPORARY WRITE ERRORS **
278	(116)	SIGNED	2	MVPRERR	** PERMANENT READ ERRORS **
280	(118)	SIGNED	2	MVPWERR	** PERMANENT WRITE ERRORS **
282	(11A)	CHARACTER	4		** RESERVED **
286	(11E)	CHARACTER	18	MVPPDATA(0)	** PROGRAM PRODUCT DATA **
286	(11E)	CHARACTER	8	MVPPNUM	** PROGRAM PRODUCT NUMBER **
294	(126)	CHARACTER	6	MVVER	** VERSION/RELEASE/MOD NUMBER **
300	(12C)	CHARACTER	4	MVFEAT	** FEATURE CODE **
304	(130)	BITSTRING	1	MVTRTCH	** FROM JFCTRTCH - IDRC SUPPORT **
		.... 1...		MVTCOMP	"X'08" ** DSN USED 3480 IDRC **
		.... .1..		MVTNCOMP	"X'04" ** NO COMPACTION **
305	(131)	CHARACTER	6	MVOPVOL	** OLD PREVIOUS VOLUME
311	(137)	CHARACTER	8	MVTOKEN	** RESERVED FOR O/C/EOV **
319	(13F)	BITSTRING	1	MVLOCFLG	** FLAG BYTE FOR LIBRARY SUPPORT
		1...		MVTRNFLG	"X'80" ** INDICATES VOLUME IN TRANSIT ** WHEN NOT SET, VOLUME IS IN ** LOCATION
		.1..		MVMVMODE	"X'40" ** MOVE MODE, ** 0 - AUTOMOVE, ** 1 - MANUALMOVE
		..1.		MVEXTBINAPPLIED	"X'20" ** EXTENDED BIN APPLIED
		.... 1111		MVLTYFLG	"X'0F" ** LOCATION TYPE - 4 BITS ** B'0000' SHELF LOCATION ** B'0001' STORAGE LOCATION ** B'0010' MANUAL LIBRARY ** B'0011' AUTOMATIC LIBRARY ** B'0100' STORE WITH BINS ** B'0101' STORE WITHOUT BINS
320	(140)	BITSTRING	1	MVTYPFLG	** FLAGS FOR LOCATION TYPE ** INFORMATION

Offsets						
Dec	Hex	Type	Len	Name(Dim)	Description	
		1111		MVNTYFLG	"X'F0'" ** LOCATION TYPE - 4 BITS ** B'0000' SHELF LOCATION ** B'0001' STORAGE LOCATION ** B'0010' MANUAL LIBRARY ** B'0011' AUTOMATIC LIBRARY ** B'0100' STORE WITH BINS ** B'0101' STORE WITHOUT BINS	
		.... 1111		MVDTYFLG	"X'0F'" ** LOCATION TYPE - 4 BITS ** B'0000' SHELF LOCATION ** B'0001' STORAGE LOCATION ** B'0010' MANUAL LIBRARY ** B'0011' AUTOMATIC LIBRARY ** B'0100' STORE WITH BINS ** B'0101' STORE WITHOUT BINS	
321	(141)	BITSTRING 1111	1	MVTYP2FLG MVHTYFLG	** MORE FLAGS FOR TYPES "X'F0'" ** LOCATION TYPE - 4 BITS ** B'0000' SHELF LOCATION ** B'0001' STORAGE LOCATION ** B'0010' MANUAL LIBRARY ** B'0011' AUTOMATIC LIBRARY ** B'0100' STORE WITH BINS ** B'0101' STORE WITHOUT BINS	
		.... 1111		MVOTYFLG	"X'0F'" ** OLD LOCATION - 4 BITS ** B'0000' SHELF LOCATION ** B'0001' STORAGE LOCATION ** B'0010' MANUAL LIBRARY ** B'0011' AUTOMATIC LIBRARY ** B'0100' STORE WITH BINS ** B'0101' STORE WITHOUT BINS	
322	(142)	SIGNED	2	MVRQPRTY	** REQUIRED LOCATION PRIORITY	
324	(144)	SIGNED	4	MVCAPACITY	** Volume capacity in MBytes ** (for uncompressed data)	
328	(148)	CHARACTER	8	MVHLOC	** HOME LOCATION NAME	
336	(150)	CHARACTER	8	MVSGNAME	** STORAGE GROUP NAME	
344	(158)	CHARACTER	8	MVLOC	** LOCATION NAME	
352	(160)	CHARACTER	8	MVDEST	** DESTINATION NAME	
360	(168)	CHARACTER	8	MVOLOC	** PREVIOUS LOCATION NAME	
368	(170)	CHARACTER	6	MVUSBIN	** SHELF MANAGED STORE BIN NO.	
374	(176)	CHARACTER	8	MVUBMDN	** BIN MEDIA NAME	
382	(17E)	CHARACTER	6	MVUSOBIN	** SHELF MANAGED STORE OLD BIN	
388	(184)	CHARACTER	8	MVUOBMDN	** OLD BIN MEDIA NAME	
396	(18C)		4	MVRETDAT	** RETENTION DATE	
400	(190)	CHARACTER	6		** RESERVED	
406	(196)	CHARACTER	6		** RESERVED	
412	(19C)	CHARACTER	8	MVLCTOKN	** VOLUME LAST CHANGE TOKEN	
420	(1A4)	BITSTRING.... ........ ...1.... ..1.	1	MVVOLTYPE MVVOLTYPE_PHYSICAL MVVOLTYPE_LOGICAL MVVOLTYPE_STACKED	** VOLUME TYPE "X'00'" ** "X'01'" ** "X'02'" ** STACKED VOLUME	
421	(1A5)	BITSTRING 1...	1	MVFLGF MVRBYSET	** FLAGS 'F' - "X'80'" ** RETAINED BY SET	

Level 1 fixed length section (62 bytes)

EDGSVREC

Offsets					
Dec	Hex	Type	Len	Name(Dim)	Description
422	(1A6)	CHARACTER	268	MVLEV0VS(0)	** LEVEL 0 VAR. LENGTH SECTION
422	(1A6)	CHARACTER	62	MVLEV1SC(0)	** LEVEL 1 SECTION
422	(1A6)	CHARACTER	8	MVDCRSID	** 1ST DATA SET CREATE SYSID
430	(1AE)	CHARACTER	16	MVCONTAINER	** CONTAINER
430	(1AE)		0	MVCONTAINER_STV	"MVCONTAINER,6" ** STACKED VOLUME
446	(1BE)	CHARACTER	16	MVOLD_CONTAINER	** OLD CONTAINER
462	(1CE)	CHARACTER	8	MVEXPTOKEN	** EXPORT TOKEN
470	(1D6)	CHARACTER	9		** RESERVED
479	(1DF)	SIGNED	1	MVLAST_POSN	** Last file end media position
480	(1E0)	SIGNED	4	MV_STV_VOLCOUNT	** VOLUME COUNT
Level 2 fixed length section (64 bytes)					
484	(1E4)	CHARACTER	6	MVDESTBIN	** Destination bin number
490	(1EA)	CHARACTER	8	MVDESTBINMEDIA	** Destination bin media name
498	(1F2)	CHARACTER	6	MVVOL1	** VOL1 label volser
504	(1F8)	CHARACTER	44		** Reserved
Variable length Section					
548	(224)	CHARACTER	268	MVVARSEC(0)	** VARIABLE LENGTH SECTION
548	(224)	BITSTRING	1	MVDSN1L	** LENGTH OF FIRST DSNAME ON TAPE **
549	(225)	BITSTRING	1	MVDSNLL	** LENGTH OF LAST DSNAME ON TAPE **
550	(226)	BITSTRING	1	MVACCLEN	** LENGTH OF A/C FIELD (OR ZERO) **
551	(227)	BITSTRING	1	MVUSELEN	** LENGTH OF USER DATA (OR ZERO) **
552	(228)	BITSTRING	1	MVACCLST	** NUMBER OF ACCESS LIST ENTRIES **
553	(229)	BITSTRING	7		** RESERVED **
560	(230)	CHARACTER	44	MVDSN1	** DSNAME OF FIRST FILE ON TAPE **
604	(25C)	CHARACTER	44	MVDSNL	** DSNAME OF LAST FILE ON TAPE **
648	(288)	CHARACTER	40	MVACCINF	** ACCOUNTING INFORMATION **
688	(2B0)	CHARACTER	30	MVDESC	** USER DESCRIPTION **
688	(2B0)		0	MVUSEFLD	"MVDESC" ** USER DESCRIPTION **
718	(2CE)	CHARACTER	2		** RESERVED **
720	(2D0)	CHARACTER	96	MVAUTIDS	** AUTHORISED USER IDS AREA **
816	(330)	CHARACTER	1	MVAUTHND(0)	** AUTH FIELD END MARKER **
816	(330)		0	MVAUTHID	"MVAUTIDS,8" ** FIRST AUTH. USER ID SLOT **
MVAUTIDS IS 12 8-BYTE SLOTS, CONTAINING UP TO 12 USER IDS					
END OF VOLUME INFORMATION					
816	(330)	SIGNED	4	MVRCEND(0)	** END OF MVRC **
816	(330)		0	MVRCLNG	"MVRCEND-MVRECORD" ** MAX LENGTH OF MVRECORD ** ** **
END OF RMM MVREC					

Constants

Len	Type	Value	Name	Description
1	CHARACTER	V	MVTYPEID	VOLUME INFO ID SYMBOL
1	CHARACTER	3	MVDEN3	'3' - 1600BPI
1	CHARACTER	4	MVDEN4	'4' - 6250BPI
1	CHARACTER	9	MVDEN9	'9' - 3480
1	CHARACTER	C	MVDENC	'C' - 3480 COMPACTED (IDRC)
1	CHARACTER	*	MVDENU	'*' - UNDEFINED
1	HEX	01	MVSTS001	1 - TAPE LIB TO REMOTE STORE
1	HEX	02	MVSTS002	2 - REMOTE STORE TO TAPE LIB
1	HEX	03	MVSTS003	3 - TAPE LIB TO LOCAL STORE
1	HEX	04	MVSTS004	4 - LOCAL STORE TO TAPE LIB
1	HEX	05	MVSTS005	5 - LOCAL STORE TO DISTANT
1	HEX	06	MVSTS006	6 - TAPE LIB TO DISTANT STORE
1	HEX	07	MVSTS007	7 - DISTANT STORE TO TAPE LIB
1	HEX	09	MVSTS009	9 - STORE LOCATION VALID
1	CHARACTER	D	MVSTIDD	D - DISTANT STORE
1	CHARACTER	L	MVSTIDL	L - LOCAL STORE
1	CHARACTER	R	MVSTIDR	R - REMOTE STORE
1	CHARACTER	T	MVSTIDT	T - TAPE LIBRARY
1	NUMB HEX	00	MVVOLTYPE_PHYSICAL	
1	NUMB HEX	01	MVVOLTYPE_LOGICAL	
1	NUMB HEX	02	MVVOLTYPE_STACKED	

EDGSVREC Cross Reference

Name	Offset	Hex Tag	Level
MV_STV_VOLCOUNT	1E0		2
MVACCINF	288		2
MVACCLEN	226		2
MVACCLST	228		2
MVALCUR	F2	F2	2

EDGSVREC

Name	Offset	Hex Tag	Level
MVALREQ	F2	F3	2
MVALTAPE	ED	10	2
MVALVERS	F2		2
MVASDATE	C8	C8	2
MVASDATM	C8		2
MVASSFLG	EC	10	2
MVASTIME	C8	CC	2
MVATIFLG	E9	2	2
MVAUTHID	330	2D0	2
MVAUTHND	330		2
MVAUTIDS	2D0		2
MVBLTAPE	ED	2	2
MVCAPACITY	144		2
MVCFLG	74		2
MVCONTAINER	1AE		2
MVCONTAINER_STV	1AE	1AE	2
MVCRDATE	3C		2
MVCRJOB	E0		2
MVCRSID	44		2
MVCRTIME	40		2
MVCRUID	D8		2
MVDCRSID	1A6		2
MVDEFRET	ED	80	2
MVDEGAUS	EE	10	2
MVDELFLG	74	80	2
MVDEN	85		2
MVDENC	85	C3	2
MVDENU	85	5C	2
MVDEN3	85	F3	2
MVDEN4	85	F4	2
MVDEN9	85	F9	2
MVDESC	2B0		2
MVDEST	160		2
MVDESTBIN	1E4		2
MVDESTBINMEDIA	1EA		2
MVDSNL	25C		2
MVDSNLL	225		2
MVDSNNO	86		2
MVDSN1	230		2
MVDSN1L	224		2
MVDTYFLG	140	F	2
MVDUMMY	74	8	2
MVENTFLG	E9	10	2
MVERRCNT	112		2
MVEXPDT	80		2
MVEXPDTO	7C		2
MVEXPTOKEN	1CE		2
MVEXRFLG	EC	1	2
MVEXTBINAPPLIED	13F	20	2
MVFABEND	E9	8	2
MVFEAT	12C		2
MVFLGA	EC		2
MVFLGAX	E9		2
MVFLGB	ED		2

EDGSVREC

Name	Offset	Hex Tag	Level
MVFLGC	EE		2
MVFLGD	EF		2
MVFLGE	F0		2
MVFLGF	1A5		2
MVFOCEAB	E9	4	2
MVFORCE	E9	1	2
MVGVCFLG	E9	80	2
MVHLOC	148		2
MVHTYFLG	141	F0	2
MVINIFLG	E9	20	2
MVKEY	0		2
MVLABNO1	90		2
MVLAST_POSN	1DF		2
MVLCDATE	54		2
MVLCSID	64		2
MVLCTIME	58		2
MVLCTOKN	19C		2
MVLCUID	5C		2
MVLEV0VS	1A6		2
MVLEV1SC	1A6		2
MVLOC	158		2
MVLOCFLG	13F		2
MVLONFLG	EC	8	2
MVLONLOC	B0		2
MVLRDDAT	C0		2
MVLTYFLG	13F	F	2
MVLTYP	F1		2
MVLUDEV	AC		2
MVLWTDAT	C4		2
MVMEDATR	95		2
MVMEDCMP	94		2
MVMEDIA	F4		2
MVMEDREC	92		2
MVMEDTY	93		2
MVMSTFLG	EC	80	2
MVMVMODE	13F	40	2
MVMVSUSE	EF	4	2
MVNLOC	98		2
MVNLTAPE	ED	20	2
MVNODSNR	EF	1	2
MVNOWNER	EE	4	2
MVNSTRID	97		2
MVNTYFLG	140	F0	2
MNVVOL	108		2
MVOALT	EF	20	2
MVOBIN	A4		2
MVOCEFLG	EC	1	2
MVOLD_CONTAINER	1BE		2
MVOLNLOC	B8		2
MVOLOC	168		2
MVOPNFLG	EC	4	2
MVOPVOL	131		2
MVOREAD	EF	80	2
MVOTYFLG	141	F	2

EDGSVREC

Name	Offset	Hex Tag	Level
MVOUPD	EF	40	2
MVOWNID	D0		2
MVPAD1	8	0	2
MVPPDATA	11E		2
MVPPNUM	11E		2
MVPPTAPE	ED	40	2
MVPRERR	116		2
MVPROTR	EF	10	2
MVPROTU	EF	8	2
MVPVOL	102		2
MVPWERR	118		2
MVRACK	FC		2
MVRBYSET	1A5	80	2
MVRCCDS	4C		2
MVRCEND	330		2
MVRCLNG	330	330	2
MVRDEN	84		2
MVREC	0		1
MVRECLEV	75		2
MVRECLN	38		2
MVRECORD	0		2
MVREINIT	EE	20	2
MVRELACT	EE	7F	2
MVREPREL	EE	40	2
MVRETDAT	18C		2
MVRETSR	EE	80	2
MVRLSFLG	EC	40	2
MVROWNER	EE	8	2
MVRQPRTY	142		2
MVSCRFLG	EC	2	2
MVSECLEV	E8		2
MVSELFLG	74	10	2
MVSGNAME	150		2
MVSLTAPE	ED	8	2
MVSTBIN	A0		2
MVSTDATE	A8		2
MVSTIDD	96	C4	2
MVSTIDL	96	D3	2
MVSTIDR	96	D9	2
MVSTIDT	96	E3	2
MVSTORID	96		2
MVSTSTAT	8E		2
MVSTS001	8E	1	2
MVSTS002	8E	2	2
MVSTS003	8E	3	2
MVSTS004	8E	4	2
MVSTS005	8E	5	2
MVSTS006	8E	6	2
MVSTS007	8E	7	2
MVSTS009	8E	9	2
MVTCOMP	130	8	2
MVTDSI	92		2
MVTNCOMP	130	4	2
MVTOKEN	137		2

EDGSVREC

Name	Offset	Hex Tag	Level
MVTRERR	112		2
MVTRNFLG	13F	80	2
MVTRTCH	130		2
MVTUSE	88		2
MVTWERR	114		2
MVTYPE	0	E5	2
MVTYPEID	0	E5	2
MVTYPFLG	140		2
MVTYP2FLG	141		2
MVUBMDN	176		2
MVUCBTYP	10E		2
MVUCDATE	6C		2
MVUCTIME	70		2
MVULTAPE	ED	1	2
MVUNIT	F4	F4	2
MVUOBMDN	184		2
MVUSBIN	170		2
MVUSE	8C		2
MVUSEFLD	2B0	2B0	2
MVUSELEN	227		2
MVUSOBIN	17E		2
MVVARSEC	224		2
MVVER	126		2
MVVMUSE	EF	2	2
MVVOLSEQ	EA		2
MVVOLSER	2		2
MVVOLTYPE	1A4		2
MVVOLTYPE_LOGICAL	1A4	1	2
MVVOLTYPE_PHYSICAL	1A4	0	2
MVVOLTYPE_STACKED	1A4	2	2
MVVOL1	1F2		2
MVVRFLG	EC	20	2
MVVRFSCI	8F	40	2
MVVRFXDI	8F	80	2
MVVRREL	8F		2
MVXINFLG	E9	40	2

EDGSVREC

Appendix C. List of DFSMSrmm Samples

DFSMSrmm provides several samples in SAMPLIB, SMPSTS, and SYS1.SEDGEXE1. Table 11 lists the samples that are available and where they can be found after SMP/E APPLY processing. After SMP/E ACCEPT processing, samples in SAMPLIB move to ASAMPLIB and samples in SMPSTS move to the AEDGSRC1 library.

Table 11. DFSMSrmm Sample Reporting Jobs

Member Name	Shows You How To	Supplied In
EDGJACTP	Print the ACTIVITY file	SAMPLIB
EDGJAUDM	Create a monthly archive from weekly audit reports	SAMPLIB
EDGJAUDW	Create a weekly archive from daily audit reports	SAMPLIB
EDGJBCAV	Build RMM ADDVOLUME subcommands from a list of barcode scanned volumes	SAMPLIB
EDGJCOMB	Audit tape library using a list of barcode scanned volumes	SAMPLIB
EDGJCVB	Create a report of volumes in a storage location	SAMPLIB
EDGJDSN	Create a report of data sets sorted by data set name	SAMPLIB
EDGJNSCR	Create a report of volumes recently returned to scratch status	SAMPLIB
EDGJRACK	Create a report based on rack number prefixes	SAMPLIB
EDGJRECL	Create a report containing information about lost volumes	SAMPLIB
EDGJRECV	Build RMM subcommands to add volumes to DFSMSrmm	SAMPLIB
EDGJROWN	Create a report about owners sorted by name and department number	SAMPLIB
EDGJRPT	Create reports using the extended report extract file	SAMPLIB
EDGJRVOL	Create a report about volumes; by volume serial number, by rack number, by security level, by owner, and by expiration date	SAMPLIB
EDGJSMF	Create a report of SMF records	SAMPLIB
EDGJSMFP	Create a list of types of SMF record found	SAMPLIB
EDGJVLT	Create a report about volumes currently in storage locations sorted by volume serial number	SAMPLIB
EDGJVLTM	Create a report about volumes moving to storage locations	SAMPLIB
EDGJVME	Create a report for VM tape volumes	SAMPLIB
EDGJVOL	Create a report about volumes sorted by volume serial number	SAMPLIB
EDGRRPTE	Create reports using the extended report extract file	EDGEXE1
EDGRRPTM	Create an extended extract file only for multiple data sets and multivolume reporting	EDGEXE1
EDGRRPTR	Create an extended report extract file	EDGEXE1
EDGXMP1	List all volumes in a multivolume set	SAMPLIB
EDGXMP2	List all data set information for a given volume	SAMPLIB

Appendix D. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen-readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

Using assistive technologies

Assistive technology products, such as screen-readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.

Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer*, *z/OS TSO/E User's Guide*, and *z/OS ISPF User's Guide Volume I* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

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Glossary

This glossary defines technical terms and abbreviations used in DFSMS documentation. If you do not find the term you are looking for, refer to the index of the appropriate DFSMS manual or view the *Glossary of Computing Terms* located at:

<http://www.ibm.com/ibm/terminology/>

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- The *IBM Dictionary of Computing*, New York: McGraw-Hill, 1994.

The following cross-reference is used in this glossary:

See: This refers the reader to (a) a related term, (b) a term that is the expanded form of an abbreviation or acronym, or (c) a synonym or more preferred term.

A

abend. Abnormal end of task.

AL. American National Standards Label.

AMODE. Addressing mode.

ANDVRS. An RMM ADDVRS TSO subcommand operand. See also *Using AND*.

ANSI. American National Standards Institute.

APAR. Authorized program analysis report.

API. Application Programming interface.

ASA. American Standards Association.

assigned date. The date that the volume is assigned to the current owner. Assigned date is not meaningful for a scratch volume.

AUL. ANSI and user header or trailer label.

automated tape library data server. A device consisting of robotic components, cartridge storage areas, tape subsystems, and controlling hardware and software, together with the set of tape volumes that reside in the library and can be mounted on the library tape drives. Contrast with *manual tape library*. See also *tape library*.

automatic cartridge loader. An optional feature of the 3480 Magnetic Tape Subsystem that allows preloading of multiple tape cartridges. This feature is standard in the 3490 Magnetic Tape Subsystem.

automatic recording. In DFSMSrmm, the process of recording information about a volume and the data sets on the volume in the DFSMSrmm control data set at open or close time.

availability. For a storage subsystem, the degree to which a data set or object can be accessed when requested by a user.

B

backup. The process of creating a copy of a data set or object to be used in case of accidental loss.

basic catalog structure (BCS). The name of the catalog structure in the integrated catalog facility environment. See also *integrated catalog facility catalog*.

BCS. Basic catalog structure.

bin number. The specific shelf location where a volume resides in a storage location; equivalent to a rack number in the removable media library. See also *shelf location*.

BLP. Bypass label processing.

BTLS. Basic Tape Library Support.

built-in storage location. One of the Removable Media Manager defined storage locations: LOCAL, DISTANT, and REMOTE.

C

cache fast write. A storage control capability in which the data is written directly to cache without using nonvolatile storage. Cache fast write is useful for temporary data or data that is readily recreated, such as the sort work files created by DFSORT. Contrast with *DASD fast write*.

cartridge eject. For an IBM Total Storage Enterprise Automated Tape Library (3494), IBM TotalStorage Enterprise Automated Tape Library (3495), or a manual tape library, the act of physically removing a tape cartridge, usually under robot control, by placing it in an output station. The software logically removes the cartridge by deleting or updating the tape volume record in the tape configuration database. For a manual tape library, the act of logically removing a tape cartridge from the manual tape library by deleting or updating the tape volume record in the tape configuration database.

cartridge entry. For either an IBM Total Storage Enterprise Automated Tape Library (3494), IBM TotalStorage Enterprise Automated Tape Library (3495), or a manual tape library, the process of logically adding a tape cartridge to the library by creating or updating the tape volume record in the tape configuration database. The cartridge entry process includes the assignment of the cartridge to scratch or private category in the library.

Cartridge System Tape. The base tape cartridge media used with 3480 or 3490 Magnetic Tape Subsystems. Contrast with *Enhanced Capacity Cartridge System Tape*.

cell. A single cartridge location within an automated tape library dataserver. See also *rack number*.

circular file. A type of file that appends data until full. Then, starting at the beginning of the file, subsequent incoming data overwrites the data already there.

command line. On a display screen, a display line usually at the bottom of the screen in which only commands can be entered.

concurrent copy. A function to increase the accessibility of data by enabling you to make a consistent backup or copy of data concurrent with the usual application program processing.

confirmation panel. A DFSMSrmm panel that lets you tell DFSMSrmm to continue or stop a delete or release action. You specify whether or not you want to confirm delete or release requests in your dialog user options.

container. A receptacle in which one or more exported logical volumes can be stored. A stacked volume containing one or more logical volumes and residing outside a virtual tape server library is considered to be the container for those volumes.

container volume. See *container*.

control data set. A VSAM key-sequenced data set that contains the complete inventory of your removable media library, as well as the movement and retention policies you define. In the control data set DFSMSrmm records all changes made to the inventory, such as adding or deleting volumes.

control data set ID. A one-to-eight character identifier for the DFSMSrmm control data set used to ensure that, in a multi-system, multi-complex environment, the correct management functions are performed.

convenience input. The process of adding a small number of tape cartridges to the IBM TotalStorage Enterprise Automated Tape Library (3494) and the IBM TotalStorage Enterprise Automated Tape Library (3495) without interrupting operations, by inserting the cartridges directly into cells in a convenience input station.

convenience input/output station. A transfer station with combined tape cartridge input and output functions in the IBM TotalStorage Enterprise Automated Tape Libraries (3494) only.

convenience output. The process of removing a small number of tape cartridges from the IBM TotalStorage Enterprise Automated Tape Library (3494) or the IBM TotalStorage Enterprise Automated Tape Library (3495) without interrupting operations, by removing the cartridges directly from cells in a convenience input station.

convenience output station. A transfer station, used by the operator to remove tape cartridges from the automated tape library dataserver, which is accessible from outside the enclosure area.

conversion. In DFSMSrmm, the process of moving your removable media library inventory from another media management system to DFSMSrmm. DFSMSrmm manages the inventory and policies once you have converted it.

create date. Create date for a data set is the date that the data set is written to tape. Create date can also be the date a data set was read if it was created before DFSMSrmm is in use. Create date is updated each time a data set is replaced and not extended. Create date for volumes and other resources defined to DFSMSrmm is the date the resource is defined to DFSMSrmm or the date specified on the command as the create date.

D

DASD. Direct access storage device.

DASD fast write. An extended function of some models of the IBM 3990 Storage Control in which data is written concurrently to cache and nonvolatile storage

and automatically scheduled for destaging to DASD. Both copies are retained in the storage control until the data is completely written to the DASD, providing data integrity equivalent to writing directly to the DASD. Use of DASD fast write for system-managed data sets is controlled by storage class attributes to improve performance. See also *dynamic cache management*. Contrast with *cache fast write*.

DASD volume. A DASD space identified by a common label and accessed by a set of related addresses. See also *volume, primary storage, migration level 1, migration level 2*.

data column. A vertical arrangement of identical data items, used on list panels to display an attribute, characteristic, or value of one or more objects.

data control block (DCB). A control block used by access method routines in storing and retrieving data.

data entry panel. A panel in which the user communicates with the system by filling in one or more fields.

Data Facility Storage Management Subsystem (DFSMS). An operating environment that helps automate and centralize the management of storage. To manage storage, SMS provides the storage administrator with control over data class, storage class, management class, storage group, and automatic class selection routine definitions.

Data Facility Sort. An IBM licensed program that is a high-speed data processing utility. DFSORT provides an efficient and flexible way to handle sorting, merging, and copying operations, as well as providing versatile data manipulation at the record, field, and bit level.

DCB. Data control block.

device. This term is used interchangeably with unit. You mount a tape on a unit or device, such as a 3490.

DFSMSdfp. A DFSMS functional component or base element of z/OS, that provides functions for storage management, data management, program management, device management, and distributed data access.

DFSMSdss. A DFSMS functional component or base element of z/OS, used to copy, move, dump, and restore data sets and volumes.

DFSMShsm. A DFSMS functional component or base element of z/OS, used for backing up and recovering data, and managing space on volumes in the storage hierarchy.

DFSMShsm-managed volume. (1) A primary storage volume, which is defined to DFSMShsm but which does not belong to a storage group. (2) A volume in a storage group, which is using DFSMShsm automatic dump,

migration, or backup services. Contrast with *system-managed volume, DFSMSrmm-managed volume*.

DFSMShsm-owned volume. A storage volume on which DFSMShsm stores backup versions, dump copies, or migrated data sets.

DFSMSrmm. A DFSMS functional component or base element of z/OS, that manages removable media.

DFSMSrmm control data set. See *control data set*.

DFSMSrmm-managed volume. A tape volume that is defined to DFSMSrmm. Contrast with *system-managed volume, DFSMShsm-managed volume*.

disaster recovery. A procedure for copying and storing an installation's essential business data in a secure location, and for recovering that data in the event of a catastrophic problem. Compare with *vital records*.

DISTANT. A DFSMSrmm built-in storage location ID. See *built-in storage location*.

dual copy. A high availability function made possible by nonvolatile storage in some models of the IBM 3990 Storage Control. Dual copy maintains two functionally identical copies of designated DASD volumes in the logical 3990 subsystem, and automatically updates both copies every time a write operation is issued to the dual copy logical volume.

dump class. A set of characteristics that describes how volume dumps are managed by DFSMShsm.

duplexing. The process of writing two sets of identical records in order to create a second copy of data.

dynamic cache management. A function that automatically determines which data sets will be cached based on the 3990 subsystem load, the characteristics of the data set, and the performance requirements defined by the storage administrator.

E

EHPCT. Extended High Performance Cartridge Tape.

eject. The process used to remove a tape volume from a system-managed library. For an automated tape library dataserver, the volume is removed from its cell location and moved to the output station. For a manual tape library, the volume is not moved, but the tape configuration database is updated to show that the volume no longer resides in the manual tape library.

empty bin. A bin that can accept a volume.

Enhanced Capacity Cartridge System Tape.

Cartridge system tape with increased capacity that can only be used with 3490E Magnetic Tape Subsystems. Contrast with *Cartridge System Tape*.

entry panel. See *data entry panel*.

EREP. Environmental Record Editing and Printing program.

expanded output. The output produced by the DFSMSrmm application programming interface when you specify OUTPUT=FIELDS and EXPAND=YES. For those subcommands for which expanded output applies, your application program receives more variable data than for standard output.

expiration. The process by which data sets and volumes are identified as available for reuse. In DFSMSrmm, all volumes have an expiration date or retention period set for them either by vital record specification policy, by user-specified JCL when writing a data set to the volume, or by an installation default. When a volume reaches its expiration date or retention period, it becomes eligible for release.

expiration date. The date at which a file is no longer protected against automatic deletion by the system.

expiration processing. The process of inventory management that ensures expired volumes are released and carries out required release actions on those volumes.

export. The operation to remove one or more logical volumes from a virtual tape server library. First, the list of logical volumes to export must be written on an export list volume and then, the export operation itself must be initiated.

exported logical volume. A logical volume that has gone through the export process and now resides on a stacked volume outside a virtual tape server library.

export list volume. A virtual tape server logical volume containing the list of logical volumes to export.

extended bin support. Enhanced options for managing shelf locations in a storage location including optimized use of the number of bins.

extended extract data set file. A data set created using the DFSMSrmm EDGJRPT exec. The records within the data set combine data set and volume information into single records.

extended record. A record in the DFSMSrmm extract data set that is mapped by the EDGXREXT mapping macro. The record contains both data set and volume information.

external label. A label attached to the outside of a tape cartridge that is to be stored in an IBM 3494 Tape

Library Dataserver or IBM 3495 Tape Library Dataserver. The label might contain the DFSMSrmm rack number of the tape volume.

extract data set. A data set that you use to generate reports.

extract data set record. A record in an extract data set that is mapped by a DFSMSrmm mapping macro.

F

field format. Field format is where the output consists of Structured Field Introducers and variable data rather than output in line format.

filtering. The process of selecting data sets based on specified criteria. These criteria consist of fully or partially-qualified data set names or of certain data set characteristics.

FIPS. Federal Information Processing Standard.

FMID. Function modification identifier.

FRR. Functional recovery routines.

G

generation data group (GDG). A collection of data sets kept in chronological order. Each data set is a generation data set.

generation data set (GDS). One generation of a generation data group.

generation number. The number of a generation within a generation data group. A zero represents the most current generation of the group, a negative integer (-1) represents an older generation and, a positive integer (+1) represents a new generation that has not yet been cataloged.

GDG. Generation data group.

GDS. Generation data set.

giga (G). The information-industry meaning depends upon the context:

1. G = 1 073 741 824(2³⁰) for real and virtual storage.
2. G = 1 000 000 000 for disk storage capacity (for example, a 4 GB fixed disk).
3. G = 1 000 000 000 for transmission rates.

GPR. General purpose register.

GRS. Global resource serialization.

grouping. When creating a report, grouping sorts report output contents into separate groups (and separate pages) based upon field contents.

guaranteed space. A storage class attribute indicating the space is to be preallocated when a data set is created. If you specify explicit volume serial numbers, SMS honors them. If space to satisfy the allocation is not available on the user-specified volumes, the allocation fails.

H

hardware configuration definition (HCD). An interactive interface in MVS that enables an installation to define hardware configurations from a single point of control.

HCD. Hardware configuration definition.

high-capacity input station. A transfer station, used by the operator to add tape cartridges to the IBM TotalStorage Enterprise Automated Tape Library (3494) or the IBM TotalStorage Enterprise Automated Tape Library (3495), which is inside the enclosure area.

high capacity output station. A transfer station, used by the operator to remove tape cartridges from the automated tape library dataserer, which is inside the enclosure area.

home. See *home location*.

home location. For DFSMSrmm, the place where DFSMSrmm normally returns a volume when the volume is no longer retained by vital records processing.

HPCT. High Performance Cartridge Tape.

I

ICETOOL. The DFSORT multipurpose data processing and reporting utility.

ID. Identifier.

IDRC. Improved data recording capability.

import. The operation to enter previously exported logical volumes residing on a stacked volume into a virtual tape server library. First, the list of logical volumes to import must be written on an import list volume and the stacked volumes must be entered, and then, the import operation itself must be initiated.

import list volume. A virtual tape server logical volume containing the list of logical volumes to import. This list can contain individual logical volumes to import and/or it can contain a list of stacked volumes in which all logical volumes on the stacked volume are imported.

imported logical volume. An exported logical volume that has gone through the import process and can be referenced as a tape volume within a virtual tape server

library. An imported logical volume originates from a stacked volume that went through the export process.

improved data recording capability (IDRC). A recording mode that can increase the effective cartridge data capacity and the effective data rate when enabled and used. IDRC is always enabled on the 3490E Magnetic Tape Subsystem.

installation defined storage location. A storage location defined using the LOCDEF command in the EDGRMMxx parmlib member.

integrated catalog facility catalog. A catalog that is composed of a basic catalog structure (BCS) and its related volume tables of contents (VTOCs) and VSAM volume data sets (VVDSs). See also *basic catalog structure*, *VSAM volume data set*.

Interactive Storage Management Facility (ISMF). The interactive interface of DFSMS that allows users and storage administrators access to the storage management functions.

Interactive Problem Control System (IPCS). A system facility that allows interactive problem analysis.

Interactive System Productivity Facility (ISPF). An IBM licensed program used to develop, test, and run interactive, panel-driven dialogs.

internal label. The internal label for standard label tapes is recorded in the VOL1 header label, magnetically recorded on the tape media.

in transit. A volume state where a volume must be moved from one location to another and DFSMSrmm believes that the move has started, but has not yet received confirmation that the move is complete. For a volume moving from a system-managed library, the move starts when the volume is ejected.

inuse bin. A bin that is occupied by a volume and into which no volume can be assigned.

inventory management. The regular tasks that need to be performed to maintain the control data set. See also *expiration processing*, *storage location management processing*, and *vital record processing*.

IPCS. Interactive Problem Control System.

IPL. Initial program load.

ISPF. Interactive System Productivity Facility.

ISMF. Interactive Storage Management Facility.

ISO. International Organization for Standardization.

J

JCL. Job control language.

JES2. Job entry subsystem 2.

JES3. Job entry subsystem 3.

JFCB. Job file control block.

journal. A sequential data set that contains a chronological record of changes made to the DFSMSrmm control data set. You use the journal when you need to reconstruct the DFSMSrmm control data set.

K

keyword. A predefined word that is used as an identifier.

kilo (K). The information-industry meaning depends upon the context:

1. $K = 1024(2^{10})$ for real and virtual storage.
2. $K = 1000$ for disk storage capacity (for example, a 4 KB fixed disk).
3. $K = 1000$ for transmission rates.

L

Library Control System. The Object Access Method component that controls optical and tape library operations and maintains configuration information.

line format. Line format is where text and variable data are formatted into lines suitable for displaying at a terminal or printing as printed documentation.

LOCAL. A DFSMSrmm built-in storage location ID. See *built-in storage location*.

location name. A name given to a place for removable media that DFSMSrmm manages. A location name can be the name of a system-managed library, a storage location name, or the location *SHELF*, identifying shelf space outside a system-managed library or storage locations.

logical volume. Logical volumes have a many-to-one association with physical tape media and are used indirectly by MVS applications. They reside in a Virtual Tape Server or on exported stacked volumes. Applications can access the data on these volumes only when they reside in a Virtual Tape Server which makes the data available via its tape volume cache or after the data has been copied to a physical volume through the use of special utilities.

low-on-scratch management. The process by which DFSMSrmm replenishes scratch volumes in a

system-managed library when it detects that there are not enough available scratch volumes.

LSR. Local shared resource.

M

management class. (1) A named collection of management attributes describing the retention and backup characteristics for a group of data sets, or for a group of objects in an object storage hierarchy. For objects, the described characteristics also include class transition. (2) In DFSMSrmm, if assigned by ACS routine to system-managed tape volumes, management class can be used to identify a DFSMSrmm vital record specification.

manual cartridge entry processing. The process by which a volume is added to the tape configuration database when it is added to a manual tape library. DFSMSrmm can initiate this process.

manual mode. An operational mode where DFSMSrmm runs without recording volume usage or validating volumes. The DFSMSrmm TSO commands, ISPF dialog, and inventory management functions are all available in manual mode.

manual tape library. An installation-defined set of stand-alone tape drives and the set of tape volumes that can be mounted on those drives.

master system. The MVS system where the master DFSMSrmm control data set resides.

master volume. A private volume that contains data that is available for write processing based on the DFSMSrmm EDGRMMxx parmliib MASTEROVERWRITE operand.

media format. The type of volume, recording format and techniques used to create the data on the volume.

media library. Removable media library.

media management system. A program that helps you manage removable media. DFSMSrmm is a media management system.

media name. An up to 8 character value that describes the shape or type of removable media stored in a storage location. Examples of media name are: SQUARE, ROUND, CARTRDGE, 3480.

media type. A value that specifies the volume's media type. Media type can be specified as *, CST, ECCST, HPCT, or EHPCT.

MEDIA 1. Cartridge system tape.

MEDIA 2. Enhanced capacity cartridge system tape.

MEDIA 3. High performance cartridge tape.

MEDIA 4. Extended high performance cartridge tape

mega (M). The information-industry meaning depends upon the context:

1. M = 1 048 576(2²⁰) for real and virtual storage.
2. M = 1 000 000 for disk storage capacity (for example, a 4 MB fixed disk).
3. M = 1 000 000 for transmission rates.

migration. The process of moving unused data to lower cost storage in order to make space for high-availability data. If you wish to use the data set, it must be recalled. See also *migration level 1*, *migration level 2*.

migration level 1. DFSMSHsm-owned DASD volumes that contain data sets migrated from primary storage volumes. The data can be compressed. See also *storage hierarchy*. Contrast with *primary storage*, *migration level 2*.

migration level 2. DFSMSHsm-owned tape or DASD volumes that contain data sets migrated from primary storage volumes or from migration level 1 volumes. The data can be compressed. See also *storage hierarchy*. Contrast with *primary storage*, *migration level 1*.

moving-in volume. A volume for which a move into a bin has been started, but not yet confirmed.

moving-out volume. A volume for which a move out of a bin has been started, but not yet confirmed.

MVS image. A single occurrence of the MVS/ESA operating system that has the ability to process work.

N

name vital record specification. A vital record specification used to define additional retention and movement policy information for data sets or volumes.

NEXTVRS. An RMM ADDVRS TSO subcommand operand. See also *Using Next*.

NL. No label.

nonscratch volume. A volume that is not scratch, which means it has valid or unexpired data on it. Contrast with *scratch*.

NSL. Nonstandard label.

O

OAM. Object access method.

object. A named byte stream having no specific format or record orientation.

object access method (OAM). An access method that provides storage, retrieval, and storage hierarchy

management for objects and provides storage and retrieval management for tape volumes contained in system-managed libraries.

OPC/ESA. Operations Planning and Control/Enterprise Systems Architecture.

optical volume. Storage space on an optical disk, identified by a volume label. See also *volume*.

optical disk. A disk that uses laser technology for data storage and retrieval.

option line. Command line.

owner. In DFSMSrmm, a person or group of persons defined as a DFSMSrmm user owning volumes. An owner is defined to DFSMSrmm through an owner ID.

owner ID. In DFSMSrmm, an identifier for DFSMSrmm users who own volumes.

P

parallel. During conversion, when you install DFSMSrmm concurrently with an existing media management system, it is called running in parallel.

partitioned data set (PDS). A data set on direct access storage that is divided into partitions, called members, each of which can contain a program, part of a program, or data.

PDS. Partitioned data set.

permanent data set. A user-named data set that is normally retained for longer than the duration of a job or interactive session. Contrast with *temporary data set*.

PF. Program function key.

physical stacked volume. See *stacked volume*.

physical volume. A volume that has a one-to-one association with physical tape media and which is used directly by MVS applications. It may reside in an automated tape library dataserer or be kept on shelf storage either at vault sites or within the data center where it can be mounted on stand-alone tape drives.

pool. A group of shelf locations in the removable media library whose rack numbers share a common prefix. The shelf locations are logically grouped so that the volumes stored there are easier to find and use.

pool ID. The identifier for a pool. You define pool IDs in parmlib member EDGRMMxx.

pooling. The process of arranging shelf locations in the removable media library into logical groups.

pool storage group. A type of storage group that contains system-managed DASD volumes. Pool storage

groups allow groups of volumes to be managed as a single entity. See also *storage group*.

primary space allocation. Amount of space requested by a user for a data set when it is created. Contrast with *secondary space allocation*.

primary storage. A DASD volume available to users for data allocation. The volumes in primary storage are called primary volumes. See also *storage hierarchy*. Contrast with *migration level 1*, *migration level 2*.

primary vital record specification. The first retention and movement policy that DFSMSrmm matches to a data set and volume used for disaster recovery and vital record purposes. See also vital record specification and secondary vital record specification.

private tape volume. A volume assigned to specific individuals or functions.

protect mode. In protect mode, DFSMSrmm validates all volume requests.

pseudo-generation data group. A collection of data sets, using the same data set name pattern, to be managed like a generation data group. The ~ masking character is used in DFSMSrmm to identify the characters in the pattern that change with each generation.

PSW. Program status word.

PTF. Program temporary fix.

pull list. A list of scratch volumes to be pulled from the library for use.

PUT. Program update tape.

R

RACF. Resource Access Control Facility.

rack number. A six-character identifier that corresponds to a specific volume's shelf location in the installation's removable media library, and is the identifier used on the external label of the volume to identify it. The rack number identifies the pool and the external volume serial number for a volume residing in an automated tape library dataserwer. The rack number identifies the pool, the external volume serial, and shelf location number for a volume not residing in an automated tape library dataserwer. The rack number is not written by the tape drive. It exists as an entry in the DFSMSrmm control data set and on the external label of the tape. See also *shelf location*.

rack pool. A group of shelves that contains volumes that are generally read-only.

ready to scratch. This describes the condition where a volume is eligible for scratch processing while it

resides in a storage location. Since no other release actions are required, the volume can be returned to scratch directly from the storage location.

recording format. For a tape volume, the format of the data on the tape; for example, 18 tracks or 36 tracks.

record-only mode. The operating mode where DFSMSrmm records information about volumes as you use them, but does not validate or reject volumes.

recovery. The process of rebuilding data after it has been damaged or destroyed, often by using a backup copy of the data or by reapplying transactions recorded in a journal.

relative start generation. Relative start generation zero is the latest generation of a tape. Relative start generation -1 is the previous generation of that tape. Relative start generation -2 is the generation before the previous one.

REMOTE. A DFSMSrmm built-in storage location ID. See also *built-in storage location*.

removable media. See also *volume*.

removable media library. The volumes that are available for immediate use, and the shelves where they could reside.

report. Data that has been selected and extracted according to the reporting tool, the type of report desired, and the formatting criteria.

reporting tool. A REXX exec that builds control statements to enable you to create reports using a reporting utility.

report type. A data source and how it is mapped.

Resource Access Control Facility (RACF). An IBM licensed program that provides for access control by identifying and verifying the users to the system; authorizing access to protected resources; logging the detected unauthorized attempts to enter the system; and logging the detected accesses to protected resources.

Resource Group. A collection of structured fields that describe the attributes of a resource such as a volume.

Restructured Extended Executor (REXX) Language. A general-purpose, high-level programming language, particularly suitable for EXEC procedures or programs for personal computing.

retention date. Retention date can be the date that a data set or volume is retained by a vital record specification or the date of the inventory management run when the data set or volume is no longer retained by a vital record specification.

retention period. The time for which DFSMSrmm retains a volume or data set before considering it for release. You can retain a data set or volume as part of disaster recovery or vital records management. You set a retention period through a vital record specification that overrides a data set's expiration date.

retention type. The types of retention for which DFSMSrmm retains a volume or data set before considering it for release. The retention types for data sets are BYDAYSCYCLE, CYCLES, DAYS, EXTRADAYS, LASTREFERENCEDAYS, UNTILEXPIRED, and WHILECATALOG. The retention types for volumes are DAYS and CYCLE.

REXX. Restructured Extended Executor Language.

RMF. Resource Measurement Facility.

RMM complex (RMMplex). One or more MVS images that share a common DFSMSrmm control data set.

RMODE. Residence mode.

S

SAF. System Authorization Facility.

scratch. The status of a tape volume that is available for general use, because the data on it is incorrect or is no longer needed. You request a scratch volume when you omit the volume serial number on a request for a tape volume mount.

scratch pool. The collection of tape volumes from which requests for scratch tapes can be satisfied. Contrast with *rack pool*.

scratch processing. The process for returning a volume to scratch status once it is no longer in use and has no outstanding release actions pending.

scratch tape. See *scratch volume*.

scratch volume. A tape volume that contains expired data only. See *scratch*.

SDB. Structured database.

SDSF. Spool display and search facility.

secondary space allocation. Amount of additional space requested by the user for a data set when primary space is full. Contrast with *primary space allocation*.

secondary vital record specification. The second retention and movement policy that DFSMSrmm matches to a data set and volume used for disaster recovery and vital records purposes. See also vital record specification and primary vital record specification.

SFI. Structured field introducer.

shelf. A place for storing removable media, such as tape and optical volumes, when they are not being written to or read.

shelf location. A single space on a shelf for storage of removable media. DFSMSrmm defines a shelf location in the removable media library by a rack number, and a shelf location in a storage location by a bin number. See also *rack number* and *bin number*.

shelf-management. Is the function provided to manage the placement of volumes in individual slots in a location. Shelf-management is provided for the removable media library using rack numbers. For storage locations it is optional as defined by the LOCDEF options in parmlib and uses bin numbers.

shelf-resident volume. A volume that resides in a non-system-managed tape library.

shelf space. See *shelf*.

SL. Standard label.

slot. See *shelf location*.

SMF. System management facility.

SMPE. System Modification Program Extended.

SSI. Subsystem interface.

stacked volume. A volume that has a one-to-one association with physical tape media and which is used in a virtual tape server to store logical volumes. A stacked volume is not used by MVS applications but by the virtual tape server and its associated utilities. It may be removed from a virtual tape server to allow transportation of logical volumes to a vault or to another virtual tape server.

standard label. An IBM standard tape label.

standard output. The output produced by the DFSMSrmm application programming interface when you specify OUTPUT=LINES or EXPAND=NO with OUTPUT=FIELDS.

storage administrator. A person in the data processing center who is responsible for defining, implementing, and maintaining storage management policies.

storage class. A collection of storage attributes that identify performance goals and availability requirements, defined by the storage administrator, used to select a device that can meet those goals and requirements.

storage group. A collection of storage volumes and attributes, defined by the storage administrator. The collections can be a group of DASD volumes or tape

volumes, or a group of DASD volumes and optical volumes treated as a single object storage hierarchy.

storage location. A location physically separate from the removable media library where volumes are stored for disaster recovery, backup, and vital records management.

(storage) location dominance. The priority used by DFSMSrmm to decide where to move a volume within the removable media library during vital record specification processing. It covers all the locations; SHELF, storage locations, and system-managed tape libraries.

storage location management processing. The process of inventory management that assigns a shelf location to volumes that have moved as a result of vital record processing. See also *vital record processing*.

stripe. In DFSMS, the portion of a striped data set, such as an extended format data set, that resides on one volume. The records in that portion are not always logically consecutive. The system distributes records among the stripes such that the volumes can be read from or written to simultaneously to gain better performance. Whether it is striped is not apparent to the application program.

striping. A software implementation of a disk array that distributes a data set across multiple volumes to improve performance.

structured field. Output from the DFSMSrmm application programming interface consisting of a Structured Field Introducer and output data.

structured field introducer (SFI). An 8-byte entity that either introduces the beginning of a group of data or introduces output data that immediately follows the introducer.

subsystem. A special MVS task that provides services and functions to other MVS users. Requests for service are made to the subsystem through a standard MVS facility known as the subsystem interface (SSI). Standard MVS subsystems are the master subsystem and the job entry subsystems JES2 and JES3.

subsystem interface (SSI). The means by which system routines request services of the master subsystem, a job entry subsystem, or other subsystems defined to the subsystem interface.

SUL. IBM standard and user header or trailer label.

SVC. Supervisor call.

system-managed storage. Storage managed by the Storage Management Subsystem. SMS attempts to deliver required services for availability, performance, and space to applications. See also *system-managed storage environment*.

DFSMS environment. An environment that helps automate and centralize the management of storage. This is achieved through a combination of hardware, software, and policies. In the DFSMS environment for MVS, this function is provided by DFSMS, DFSORT, and RACF. See also *system-managed storage*.

system-managed tape library. A collection of tape volumes and tape devices, defined in the tape configuration database. A system-managed tape library can be automated or manual. See also *tape library*.

system-managed volume. A DASD, optical, or tape volume that belongs to a storage group. Contrast with *DFSMSShsm-managed volume*, *DFSMSrmm-managed volume*.

system programmer. A programmer who plans, generates, maintains, extends, and controls the use of an operating system and applications with the aim of improving overall productivity of an installation.

T

tape configuration database (TCDB). One or more volume catalogs used to maintain records of system-managed tape libraries and tape volumes.

tape librarian. The person who manages the tape library. This person is a specialized storage administrator.

tape library. A set of equipment and facilities that support an installation's tape environment. This can include tape storage racks, a set of tape drives, and a set of related tape volumes mounted on those drives. See also *system-managed tape library*, *automated tape library data server*.

Tape Library Control System (TLCS). IBM program offering 5785-EAW. DFSMSrmm replaces TLCS.

tape library dataserver. A hardware device that maintains the tape inventory that is associated with a set of tape drives. An automated tape library dataserver also manages the mounting, removal, and storage of tapes. An automated tape library dataserver that supports system-managed storage of tape volumes. The IBM automated tape library dataservers include the IBM 3494 Tape Library Dataserver and the IBM 3495 Tape Library Dataserver.

tape storage group. A type of storage group that contains system-managed private tape volumes. The tape storage group definition specifies the system-managed tape libraries that can contain tape volumes. See also *storage group*.

tape subsystem. A magnetic tape subsystem consisting of a controller and devices, which allows for

the storage of user data on tape cartridges. Examples of tape subsystems include the IBM 3490 and 3490E Magnetic Tape Subsystems.

tape volume. A tape volume is the recording space on a single tape cartridge or reel. See also *volume*.

TCDB. Tape configuration database.

temporary data set. An uncataloged data set whose name begins with & or &&, that is normally used only for the duration of a job or interactive session. Contrast with *permanent data set*.

tera (T). The information-industry meaning depends upon the context:

1. T = 1 099 511 627 776(2⁴⁰) for real and virtual storage.
2. T = 1 000 000 000 000 for disk storage capacity (for example, 4 TB of DASD storage).
3. T = 1 000 000 000 000 for transmission rates.

TLCS. Tape Library Control System.

TSO. Time Sharing Option.

U

Until Expired. Allows the use of vital record specification policies for managing retention in a location as long as the volume expiration date has not been reached.

use attribute. (1) The attribute assigned to a DAD volume that controls when the volume can be used to allocate new data sets; use attributes are *public*, *private*, and *storage*. (2) For system-managed tape volumes, use attributes are *scratch* and *private*.

user volume. A volume assigned to a user, that can contain any data and can be rewritten as many times as the user wishes until the volume expires.

using AND. A method for linking DFSMSrmm vital record specifications to create chains of vital record specifications. DFSMSrmm applies policies in chains using AND only when all the retention criteria are true.

using NEXT. A method for linking DFSMSrmm vital record specifications to create chains of vital record specifications. DFSMSrmm applies policies in chains using NEXT one vital record at a time.

V

virtual export. A method of exporting a volume by marking a volume as exported by using the DFSMSrmm subcommands.

virtual input/output (VIO) storage group. A type of storage group that allocates data sets to paging

storage, which simulates a DASD volume. VIO storage groups do not contain any actual DASD volumes. See also *storage group*.

virtual tape server (VTS). This subsystem, integrated into the IBM TotalStorage Enterprise Automated Tape Library (3494) or the IBM TotalStorage Enterprise Automated Tape Library (3495), combines the random access and high performance characteristics of DASD with outboard hierarchical storage management and virtual tape devices and tape volumes.

vital record group. A set of data sets with the same name that matches to the same DFSMSrmm vital record specification.

vital record processing. The process of inventory management that determines which data sets and volumes DFSMSrmm should retain and whether a volume needs to move. These volumes and data sets have been assigned a vital record specification.

vital records. A data set or volume maintained for meeting an externally-imposed retention requirement, such as a legal requirement. Compare with *disaster recovery*.

vital record specification. Policies defined to manage the retention and movement of data sets and volumes used for disaster recovery and vital records purposes.

vital record specification management value. A one-to-eight character name defined by your installation and used to assign management and retention values to tape data sets. The vital record management value can be any value you chose to create a match between a vital record specification and data sets and volumes in your installation. By matching the vital record specifications to the data set or volumes, DFSMSrmm applies the retention and movement policies you define in the vital record specifications. During inventory management VRSEL processing, DFSMSrmm selects the correct, best matching vital record specification for a tape data set or volume.

VOLSER. Volume serial number.

volume. The storage space on DASD, tape, or optical devices, which is identified by a volume label. See also *DASD volume*, *logical volume*, *optical volume*, *stacked volume*, and *tape volume*.

volume catalog. See *tape configuration database*.

volume expiration date. The date the volume should expire based on the highest expiration date of the data sets that reside on the volume.

volume serial number (VOLSER). (1) An identification number in a volume label that is assigned when a volume is prepared for use on the system. For standard label volumes, the volume serial number is the VOL1 label of the volume. For no label volumes, the volume

| serial number is the name the user assigns to the
| volume. (2) In DFSMSrmm, volume serial numbers do
| not have to match rack numbers.

VTS. Virtual tape server.

W

warning mode. The operating mode in which DFSMSrmm validates volumes as you use them, but issues warning messages when it discovers errors instead of rejecting volumes.

write-to-operator (WTO). An optional user-coded service that allows a message to be written to the system console operator informing the operator of errors and unusual system conditions that may need to be corrected.

WTO. Write-to-operator.

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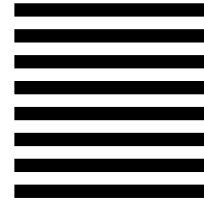
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